

CAPSULA ESPACIAL

Revista digital de astronáutica y espacio

Nº 35 - 2019

Sistema Solar en 3-D

Estimados lectores

Aquí veremos un apasionante viaje por el Sistema Solar en 3 dimensiones (3D) en fotografías tomadas por distintas naves espaciales que orbitaron y orbitan planetas, lunas, asteroides, cometas, como también veremos fotografías de los suelos de varios lugares de nuestro Sistema Solar, se aconseja usar anaglifos (anteojos de dos colores) para disfrutar de este extraordinario contenido.

Muchas Gracias

Biagi, Juan

Contacto



https://capsula-espacial.blogspot.com



https://www.instagram.com/capsula_espacial/



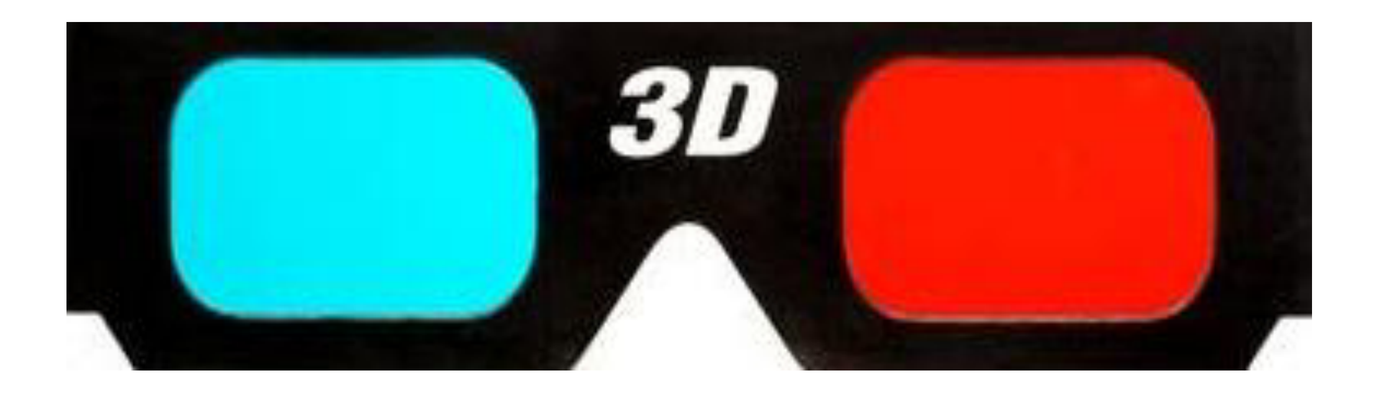
r.capsula.espacial@gmail.com

Portada Módulo Lunar Apollo posado en la Luna en 3D (NASA)

Visión 3D a traves de lentes anaglifos

Las imágenes de anaglifo son imágenes de dos dimensiones capaces de provocar un efecto tridimensional cuando se ven con lentes especiales (lentes de color diferente para cada ojo).

Se basan en el fenómeno de síntesis de la visión binocular y fue patentado por Louis Ducos du Hauron en el 1891 con el nombre de anaglifo, las imágenes se componen de dos capas de color superimpuestas pero movidas una respecto a la otra ligeramente para producir el efecto de profundidad, usualmente, el objeto principal está en el centro, mientras que lo de alrededor y el fondo están movidos lateralmente en direcciones opuestas, la imagen contiene dos imágenes filtradas por color, una para cada ojo, cuando se ve a través de las lentes anaglifo, se revelará una imagen tridimensional, la corteza visual del cerebro fusiona esto dentro de la percepción de una escena con profundidad.



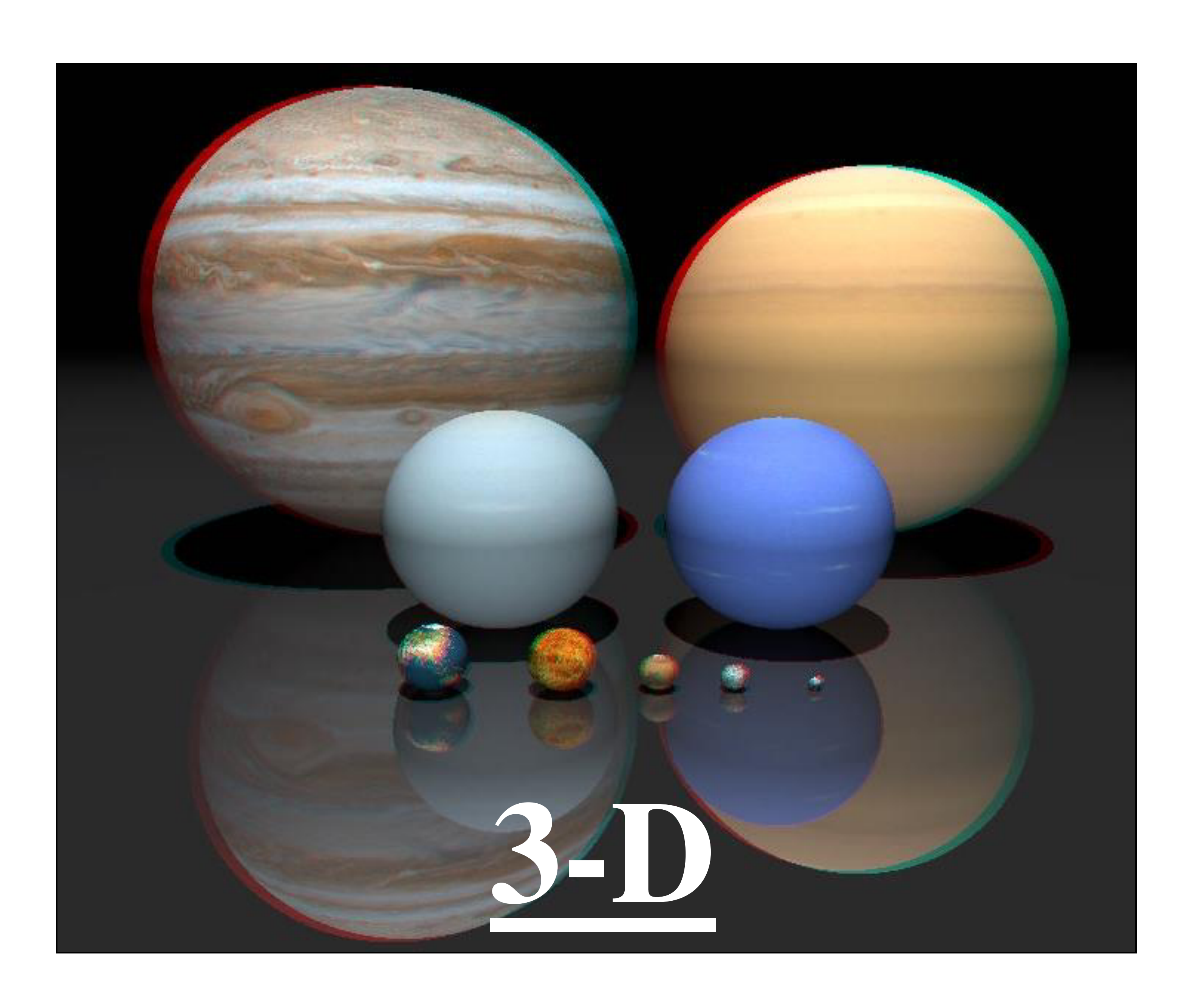
Ver en anaglifos a través de filtros de color apropiados da como resultado que cada ojo observa una imagen levemente diferente, en un anaglifo rojo-azul (más exactamente, cian, que es el complementario del rojo) por ejemplo, el ojo cubierto por el filtro rojo ve las partes rojas de la imagen como "blancas" y las partes azules como "oscuras" (el cerebro produce la adaptación de los colores) por otro lado, el ojo cubierto por el filtro azul percibe el efecto opuesto, el resto de la composición son percibidas iguales por los ojos, el cerebro fusiona las imágenes recibidas de cada ojo y las interpreta como una imagen con profundidad.

Los filtros hechos de papel celofán no compensan la diferencia en longitud de onda de los filtros rojo y cian, por lo tanto con estos simples lentes caseros, la imagen roja es un poco borrosa, cuando ve una imagen tipo anaglifo en la computadora, la mejor calidad se obtiene con lentes de acrílico moldeados, empleados para compensar la dioptría y balancear el enfoque del filtro rojo con el cian, la corrección es de sólo 1/2 + en el filtro rojo, por lo que personas con miopía manifiestan incomodidad con la diferencia en los lentes, al ser una imagen ligeramente más grande que la otra.

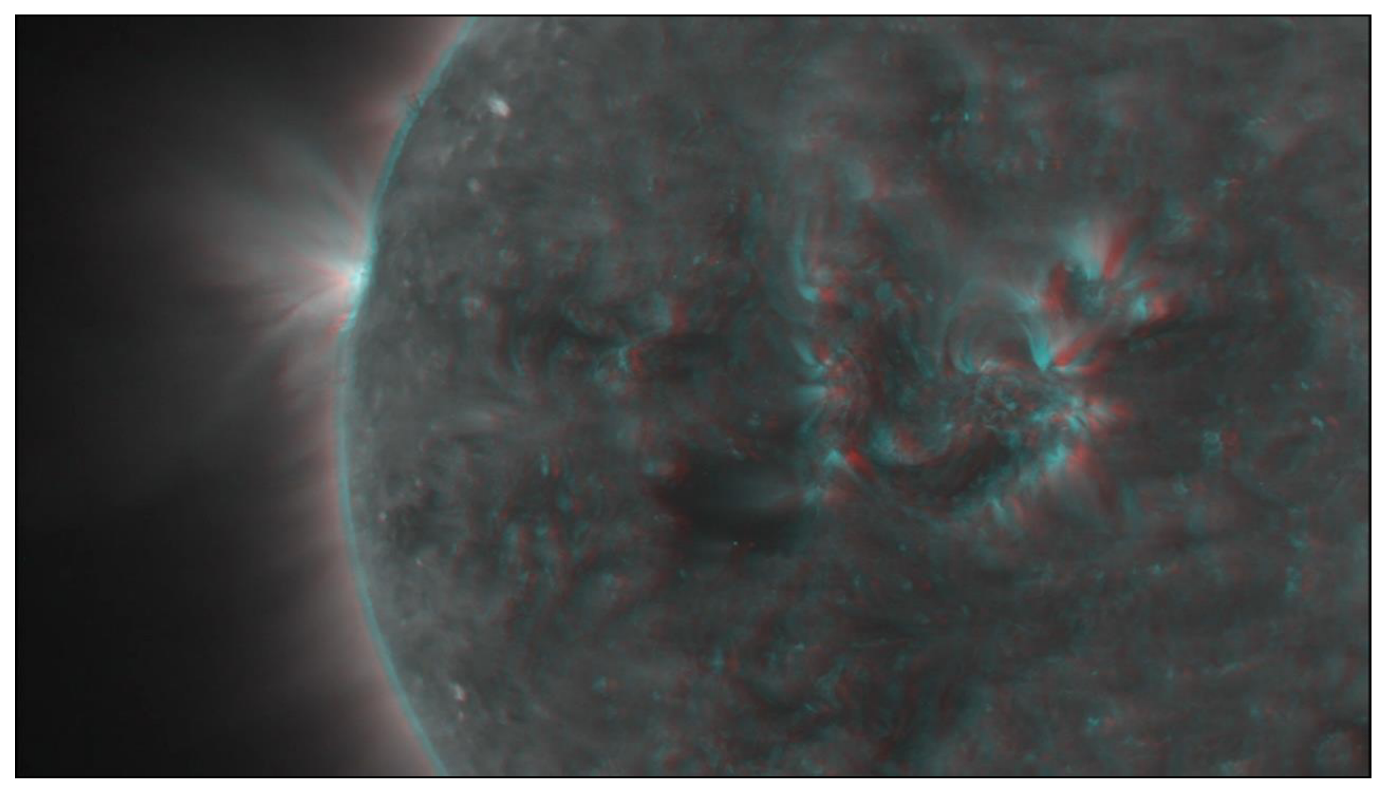
Bienvenidos

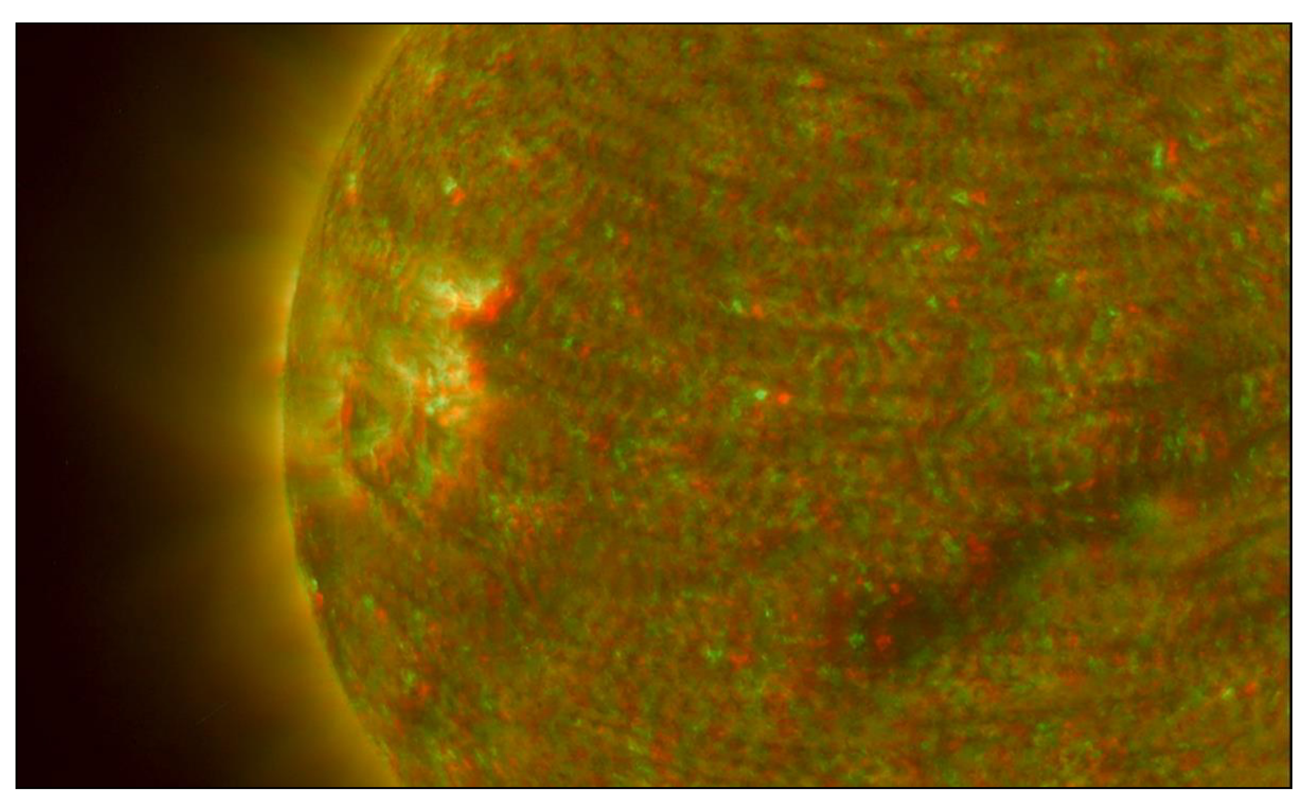
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Sistema Solar



Sol





National Aeronautics and Space Administration

NASA

STEREO

Solar TErrestrial RElations Observatory

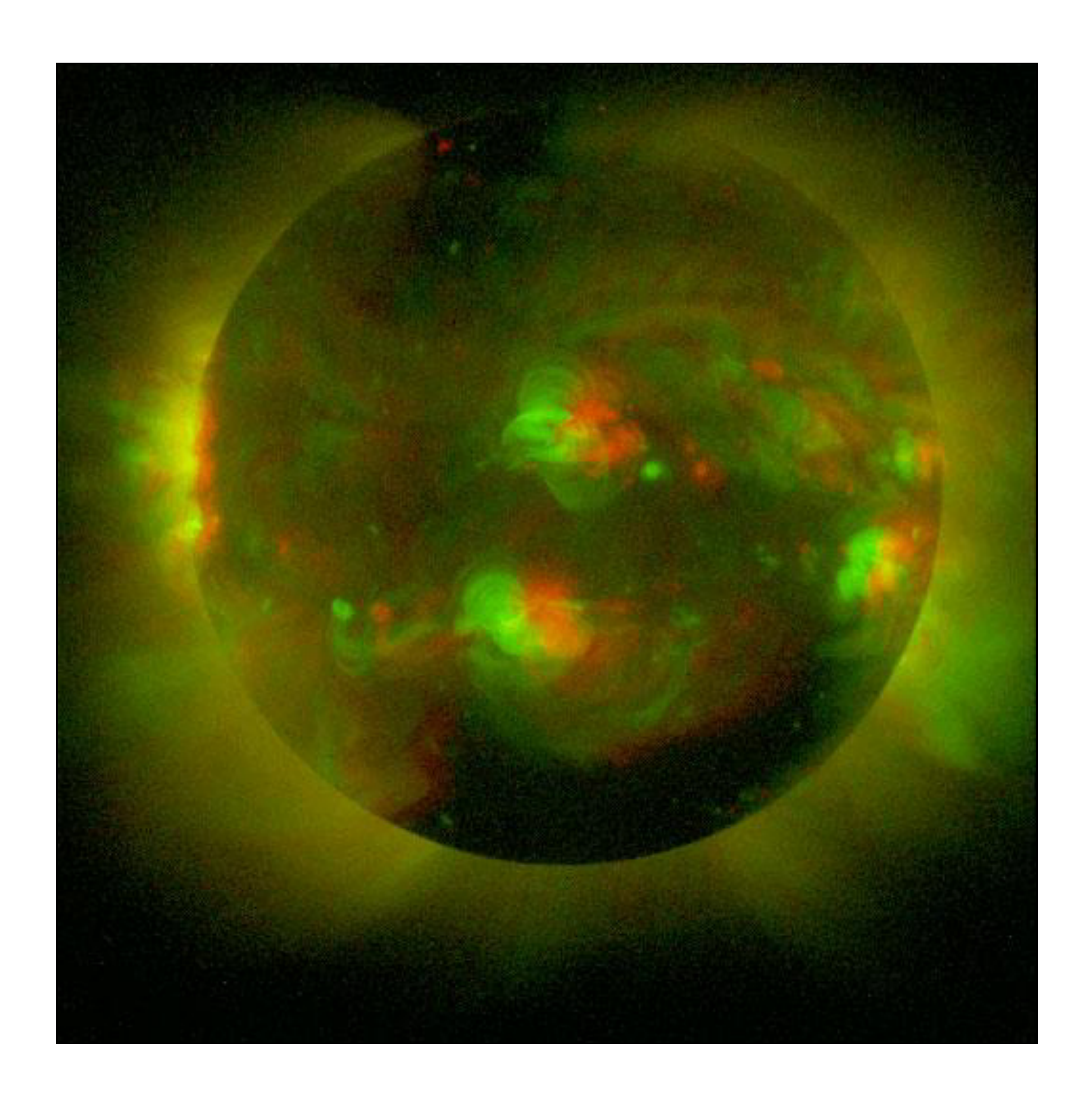
The brighter areas are active regions -- often the sources of "space weather." Effects from the Sun can cause disruptions for power transmission, communications, and navigation and can threaten astronaut safety.

Use 3D glasses to see this side in 3D!

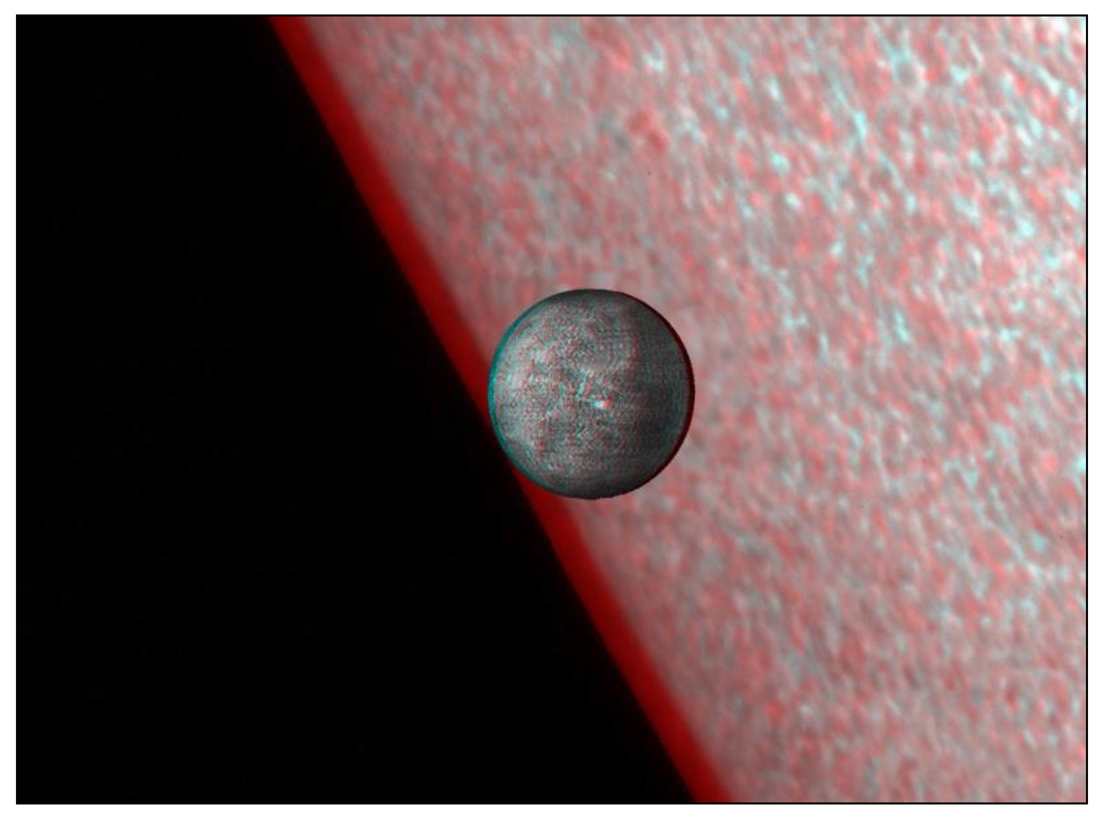
Here is one of the first ever 3D images of the Sun. It is a composite of two images in one ultraviolet wavelength of light taken at the same time. **STEREO** with two nearly identical space-based observatories - one ahead of Earth, the other trailing behind - is providing the first-ever stereoscopic measurements to study the Sun and solar storms.

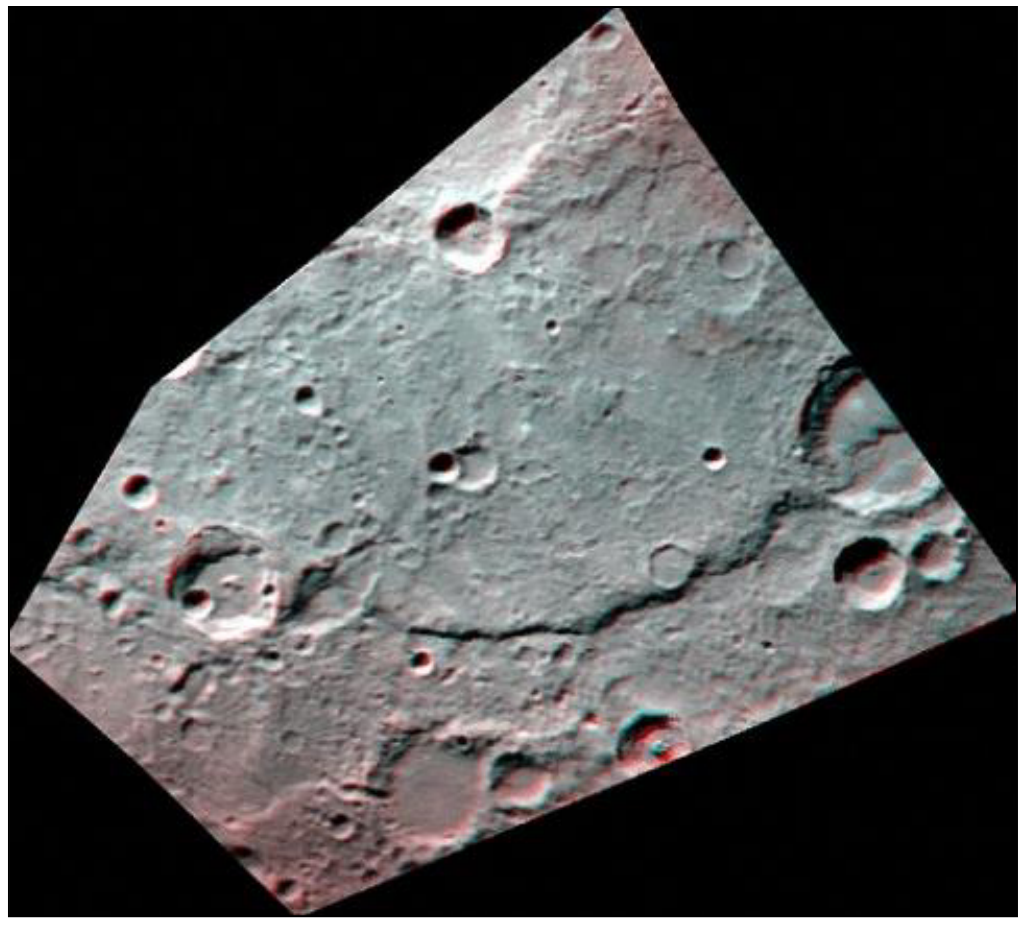
To see more 3D images from STEREO and learn how to make or get 3D glasses, go to:

http://stereo.gsfc.nasa.gov

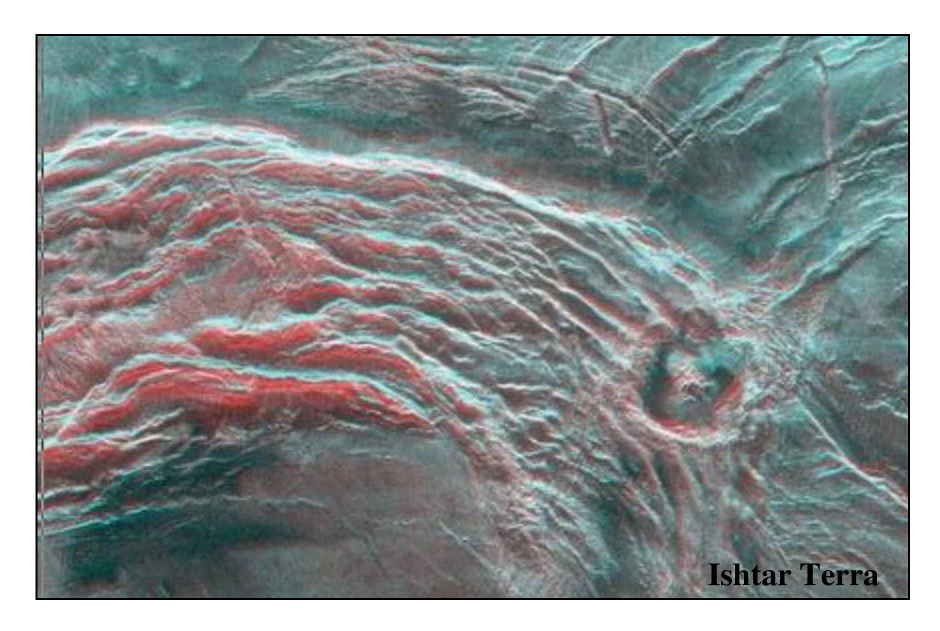


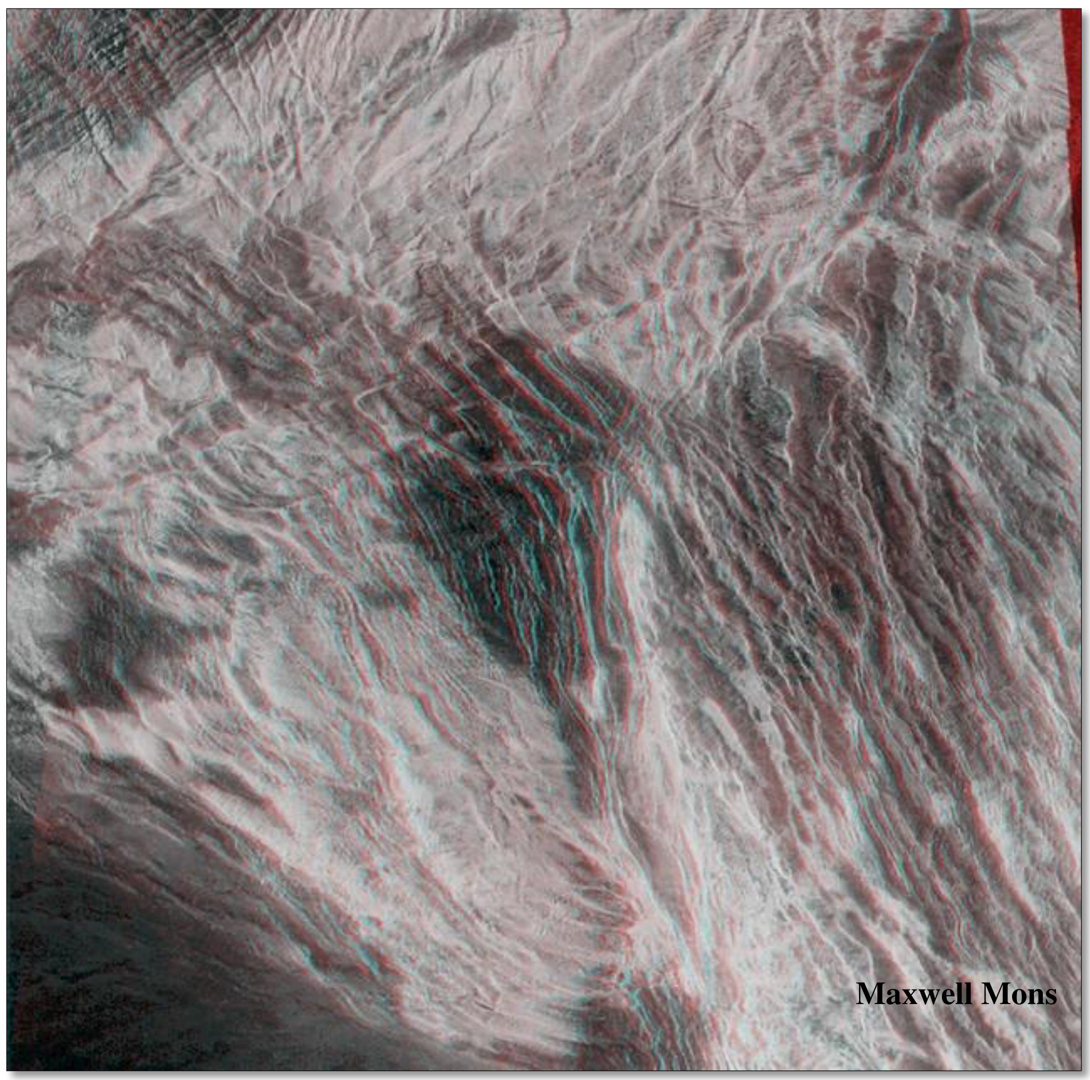
Mercurio

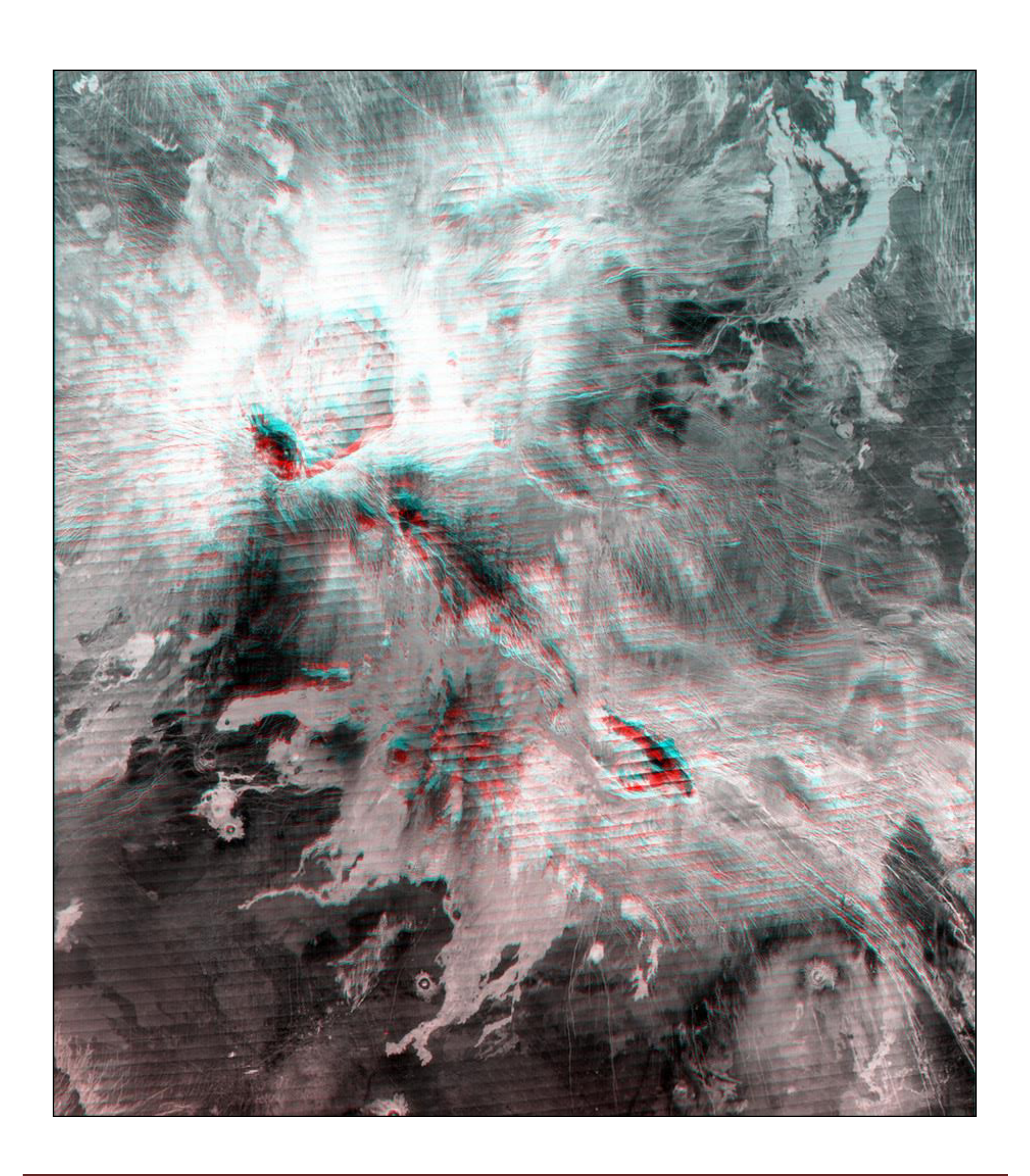


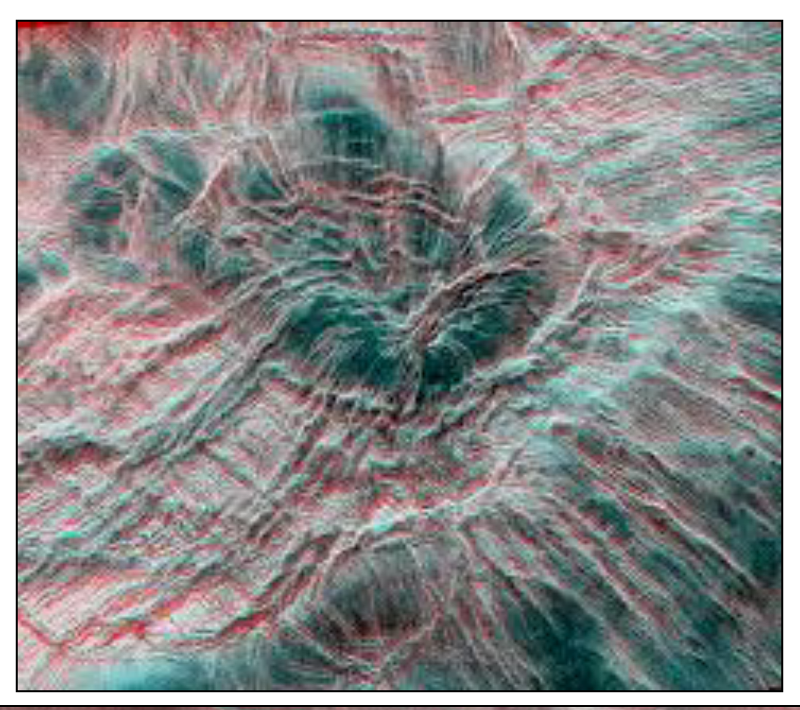


Venus

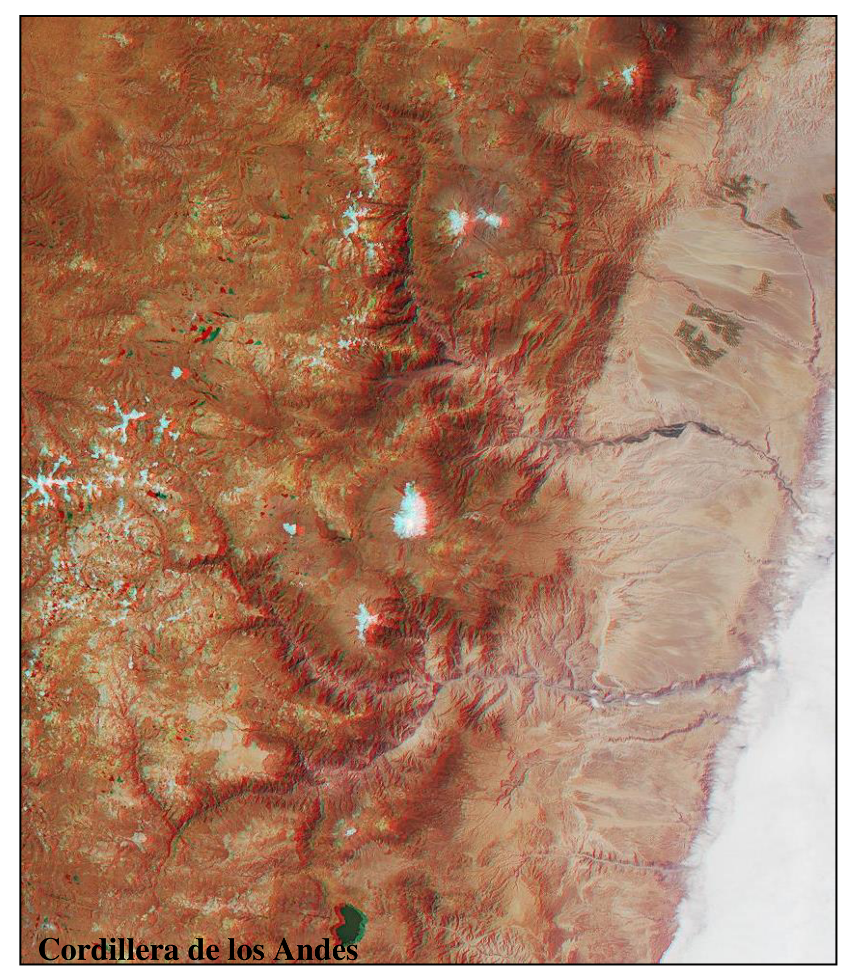


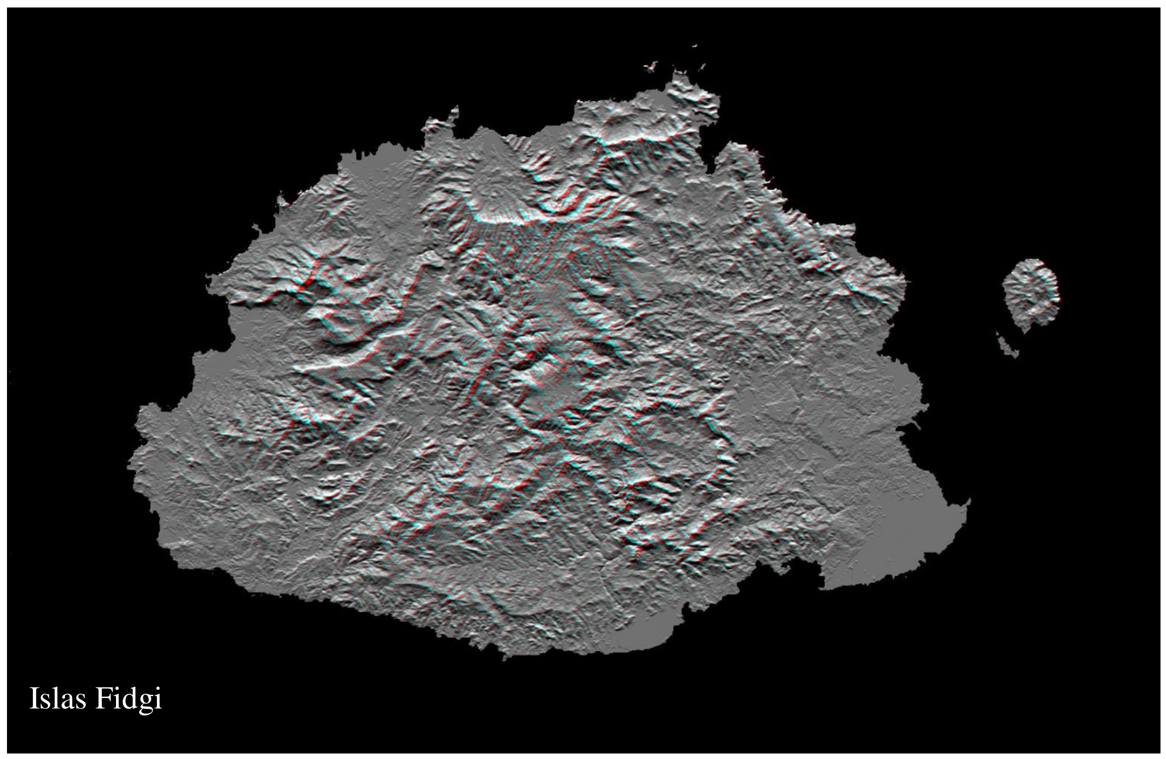


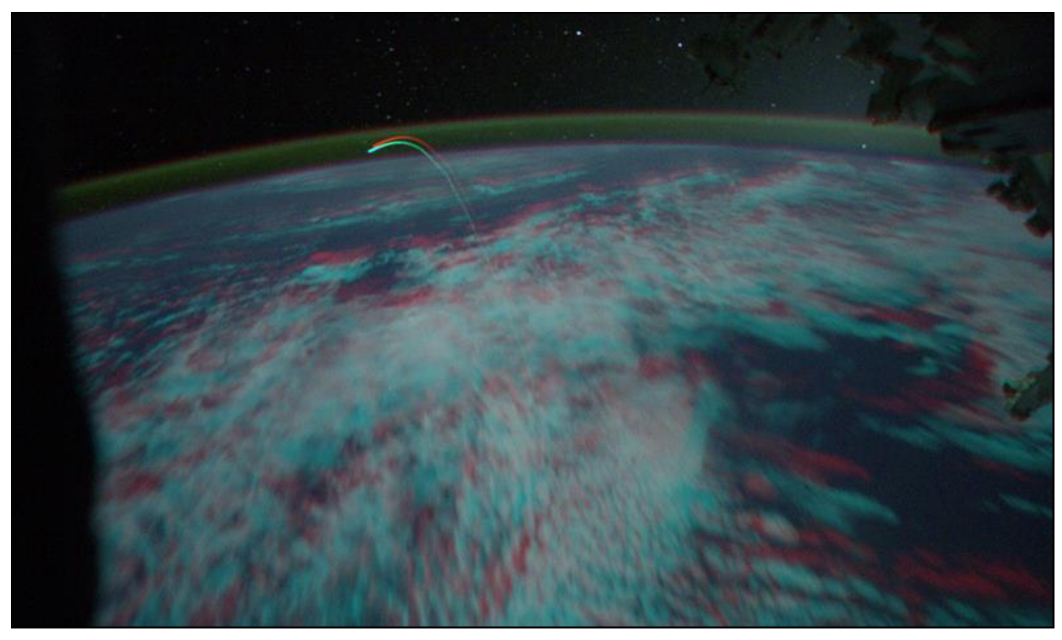




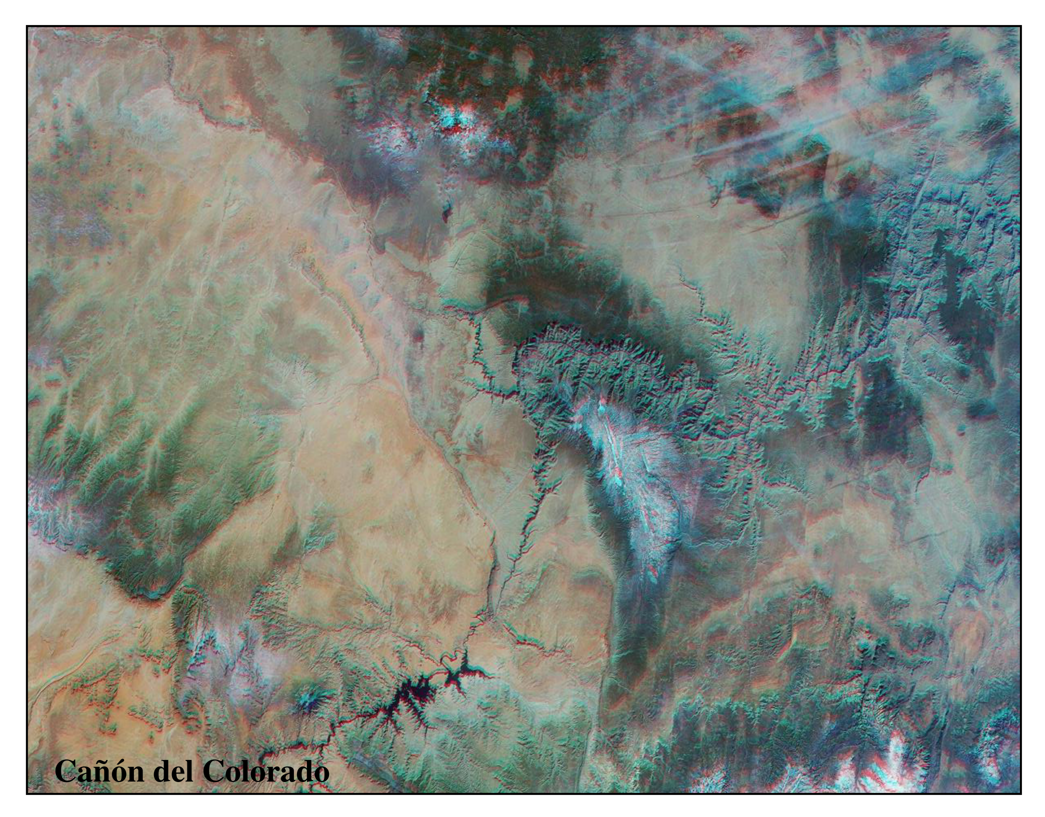
Tierra

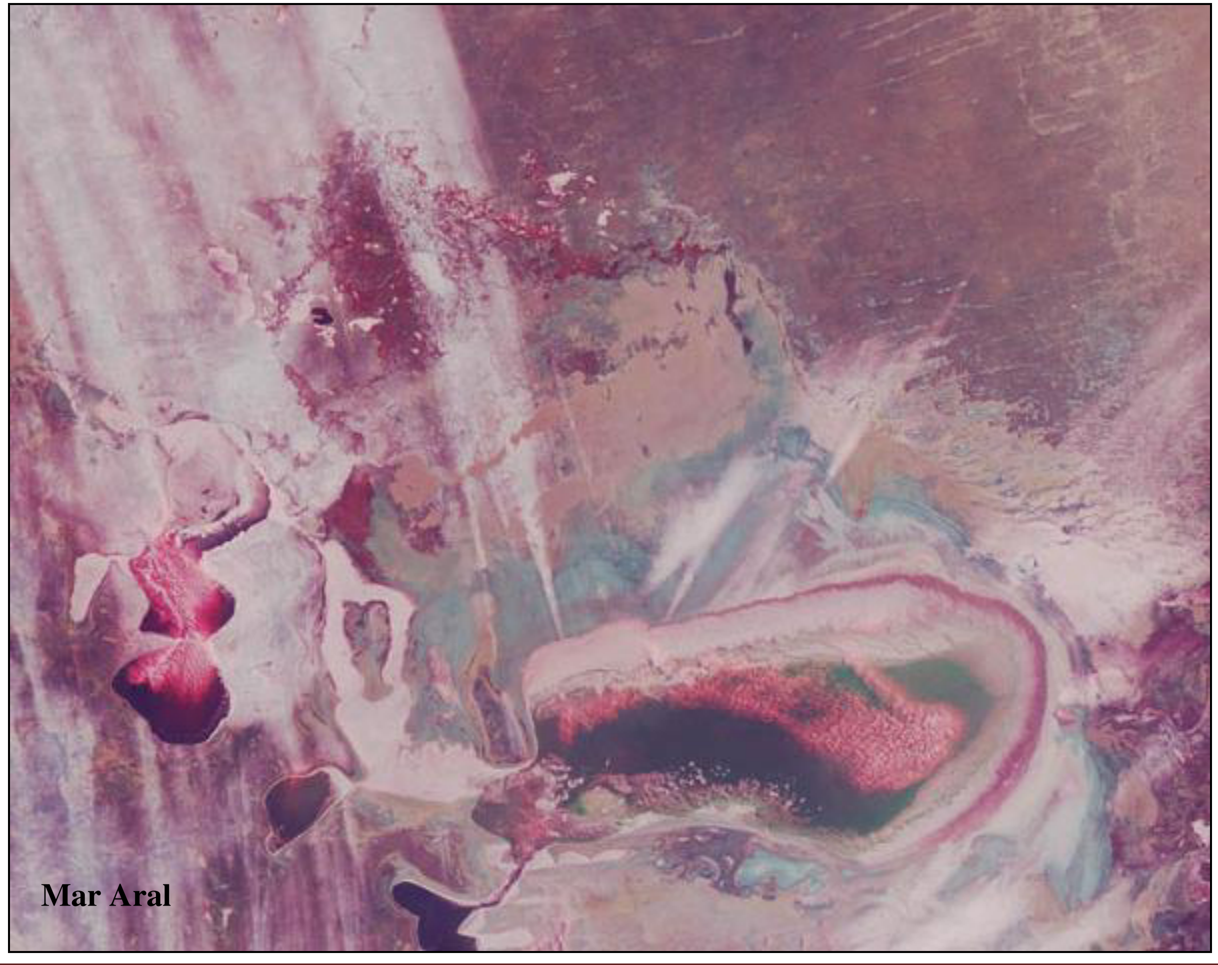

Cordillera de los Andes

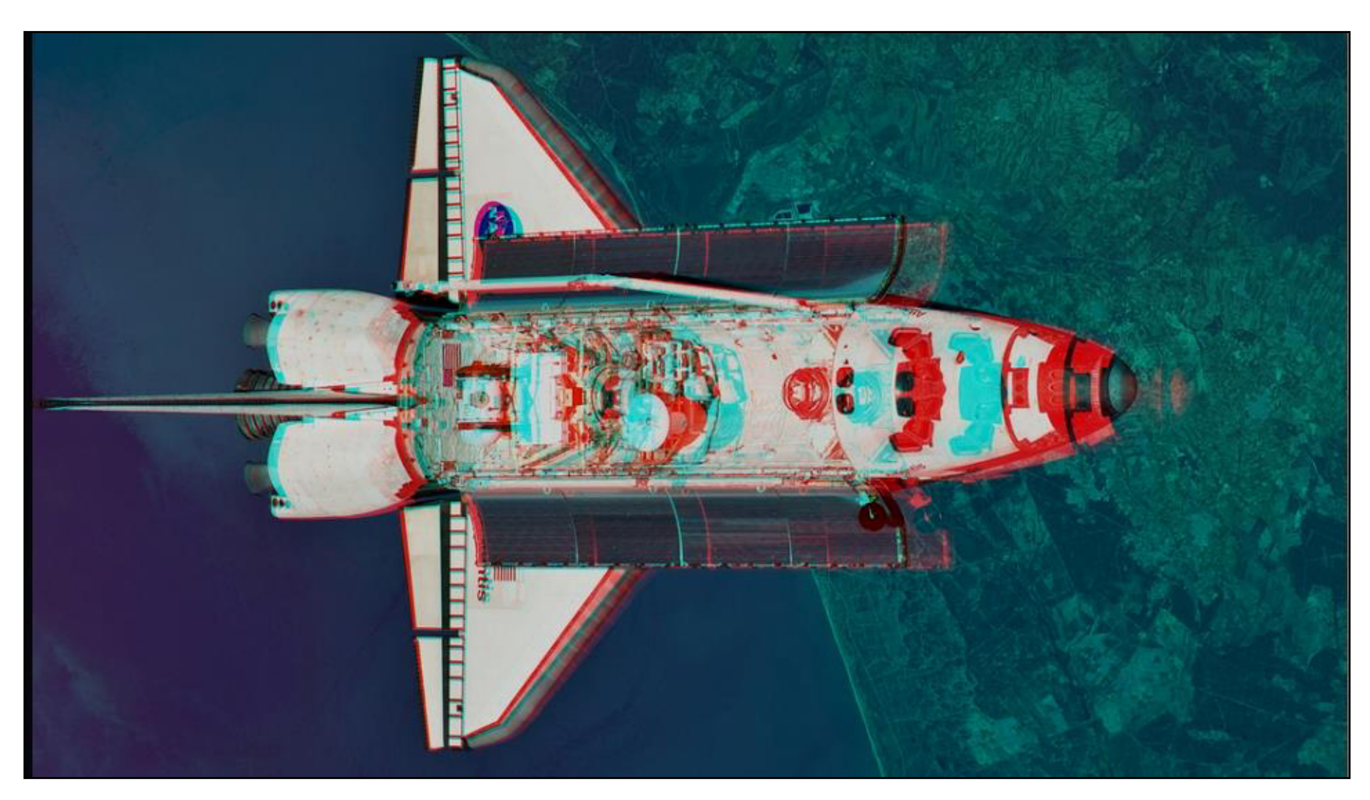

Islas Fidgi

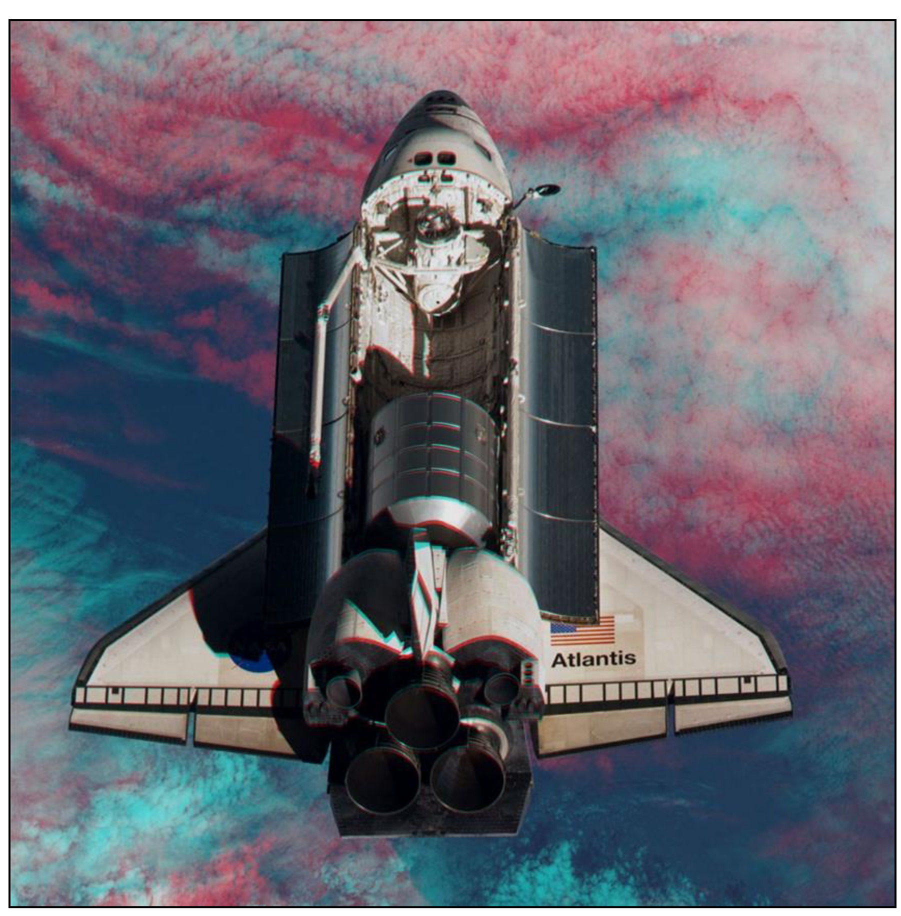


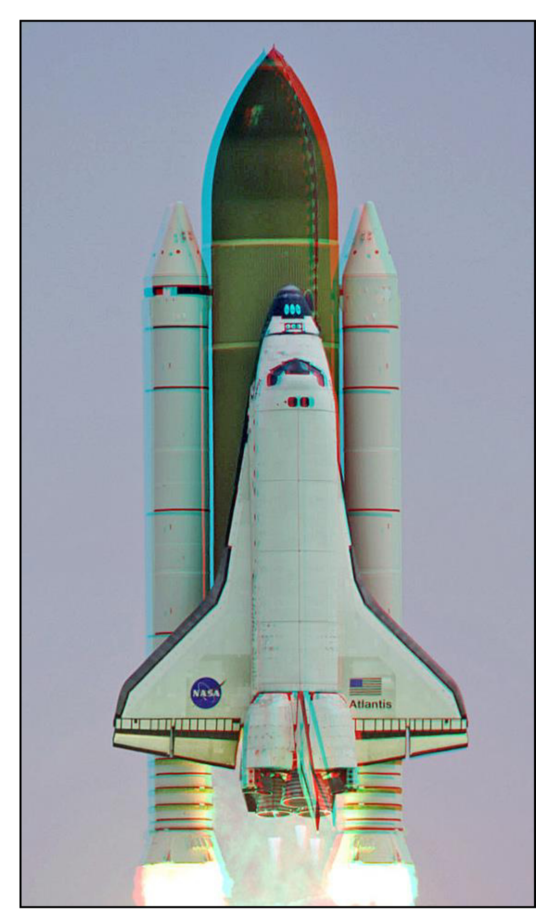
Himalaya


Cañón del Colorado

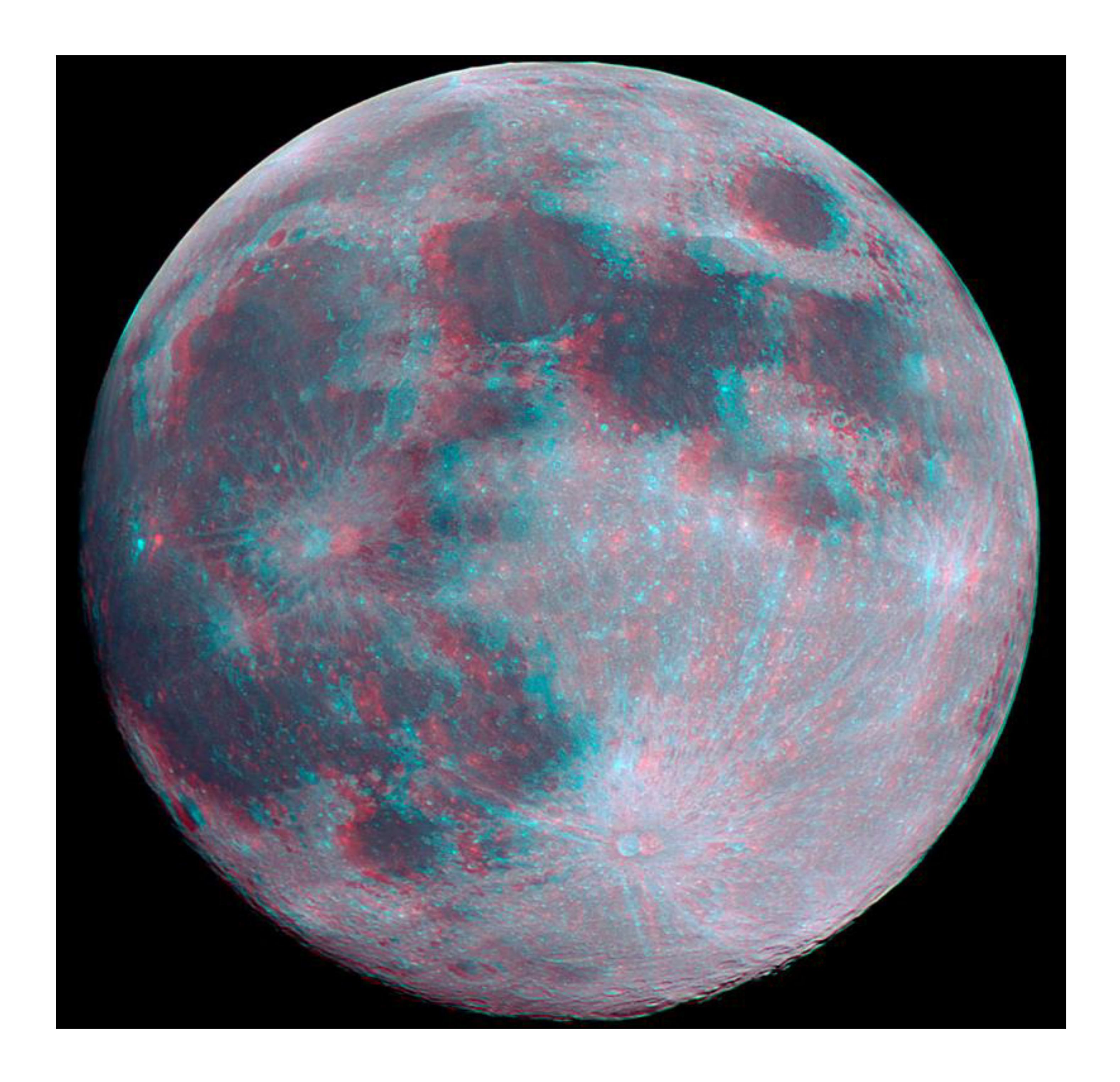

Mar Aral

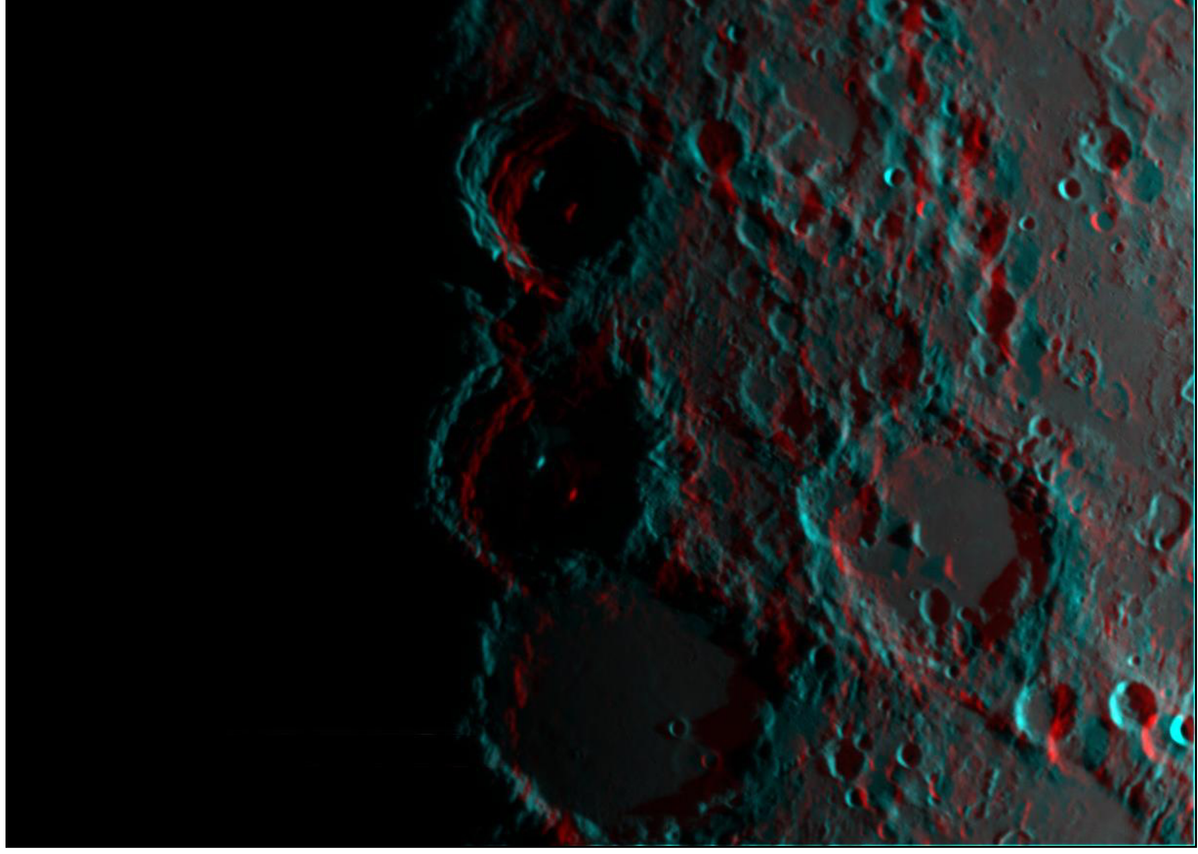


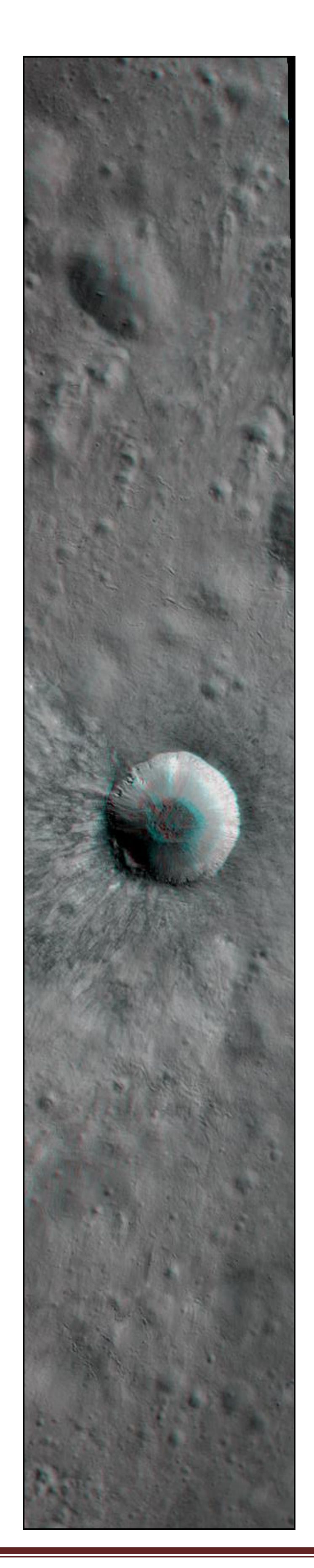

Atlantis

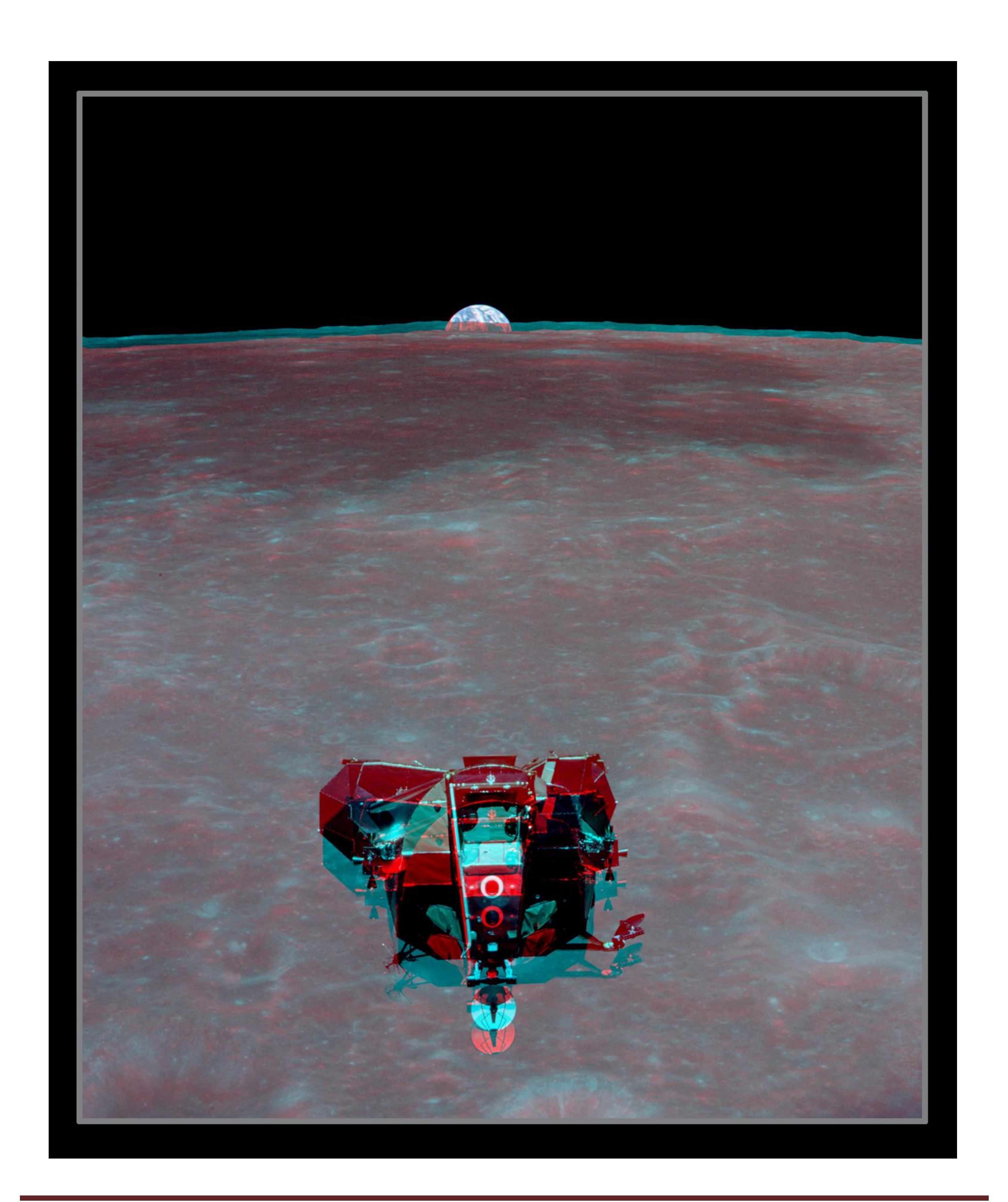

NASA
Atlantis

Luna

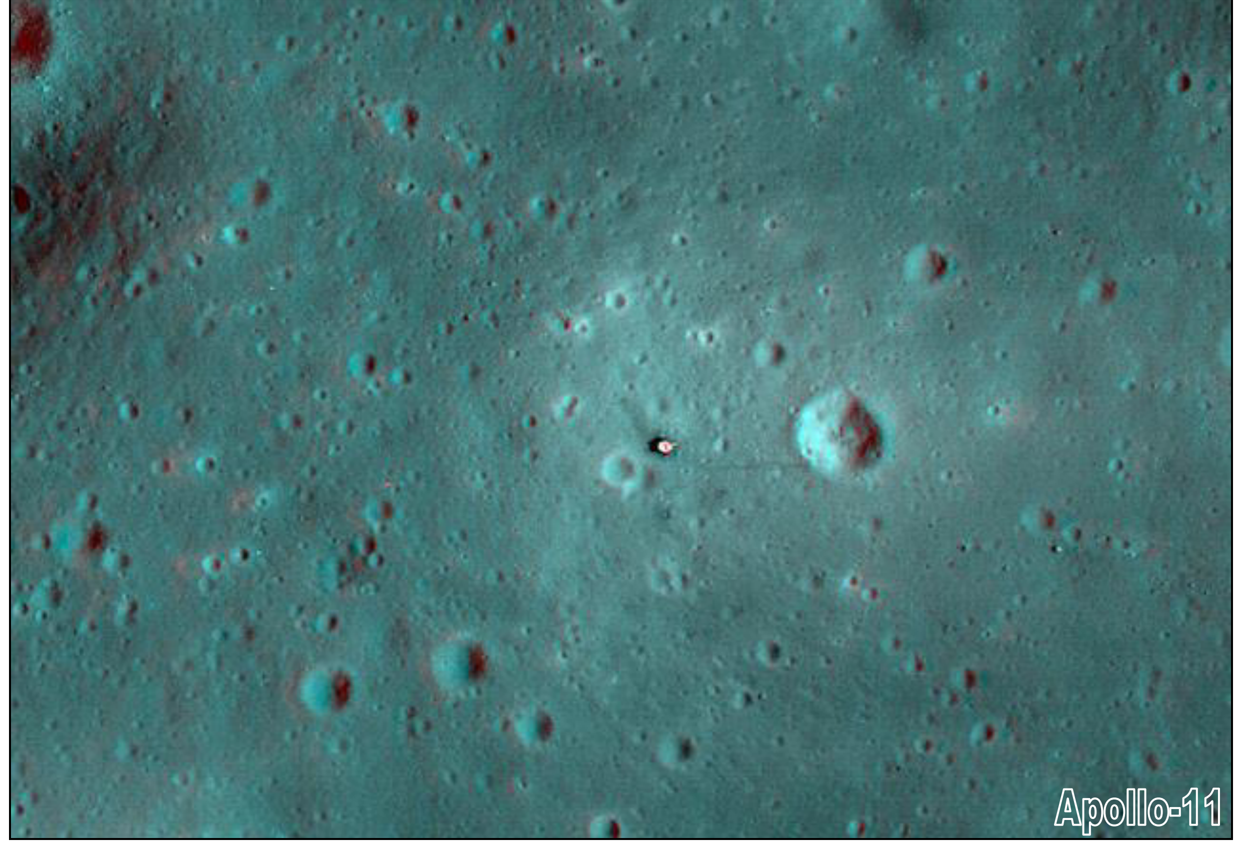




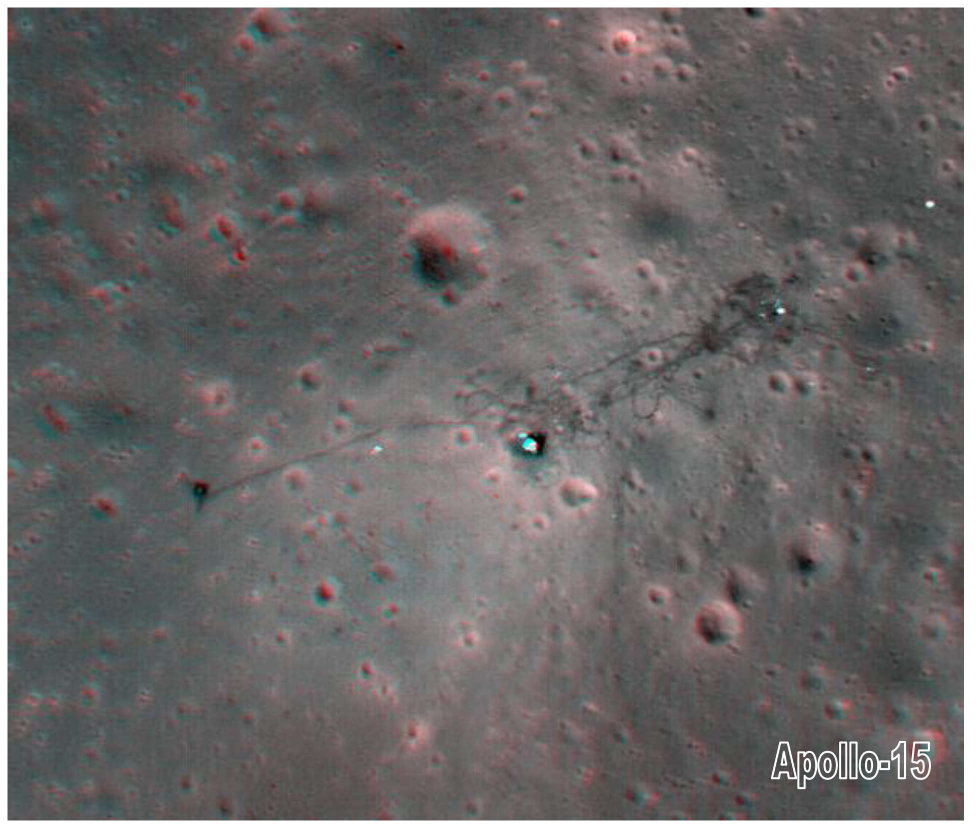






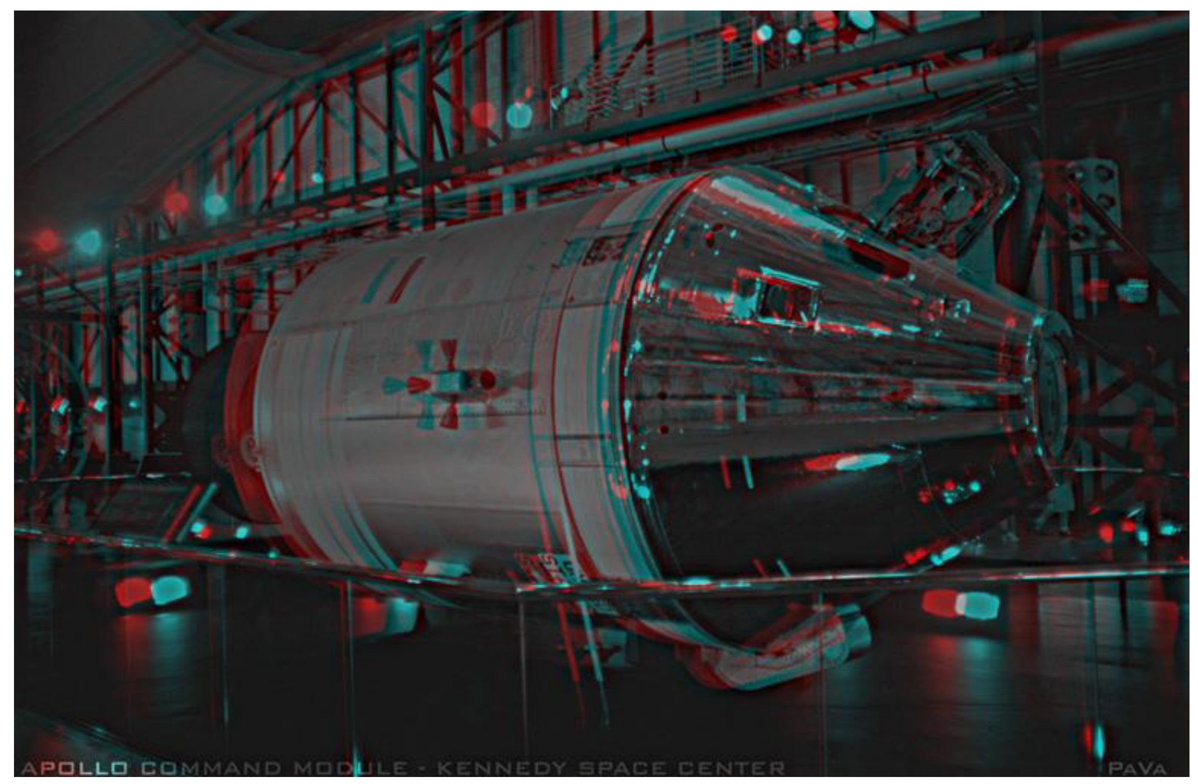

Apollo-11

Apollo-14



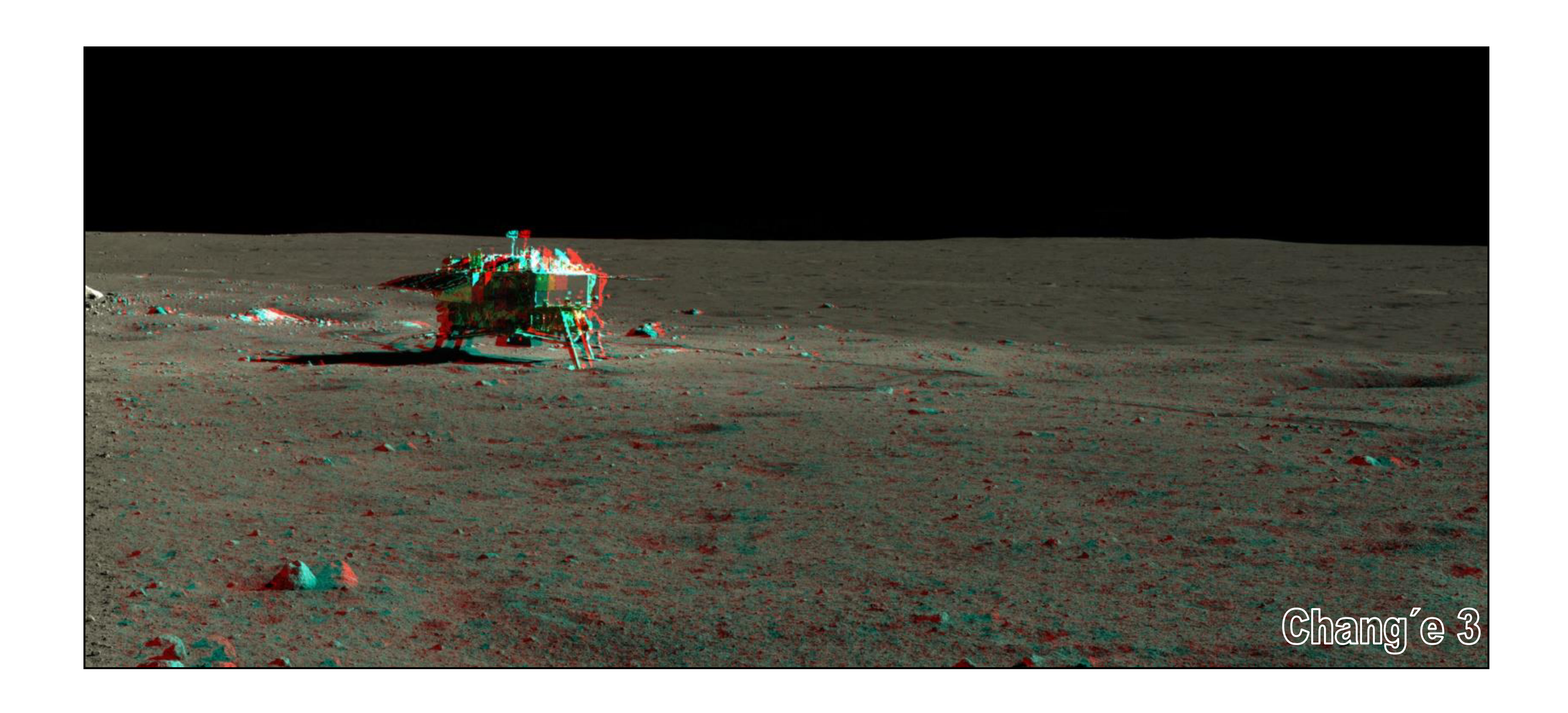
December 14, 1972 - looking south - Jack and Gene at station 6 where Tracy's Rock is resting at the base of the North Massif

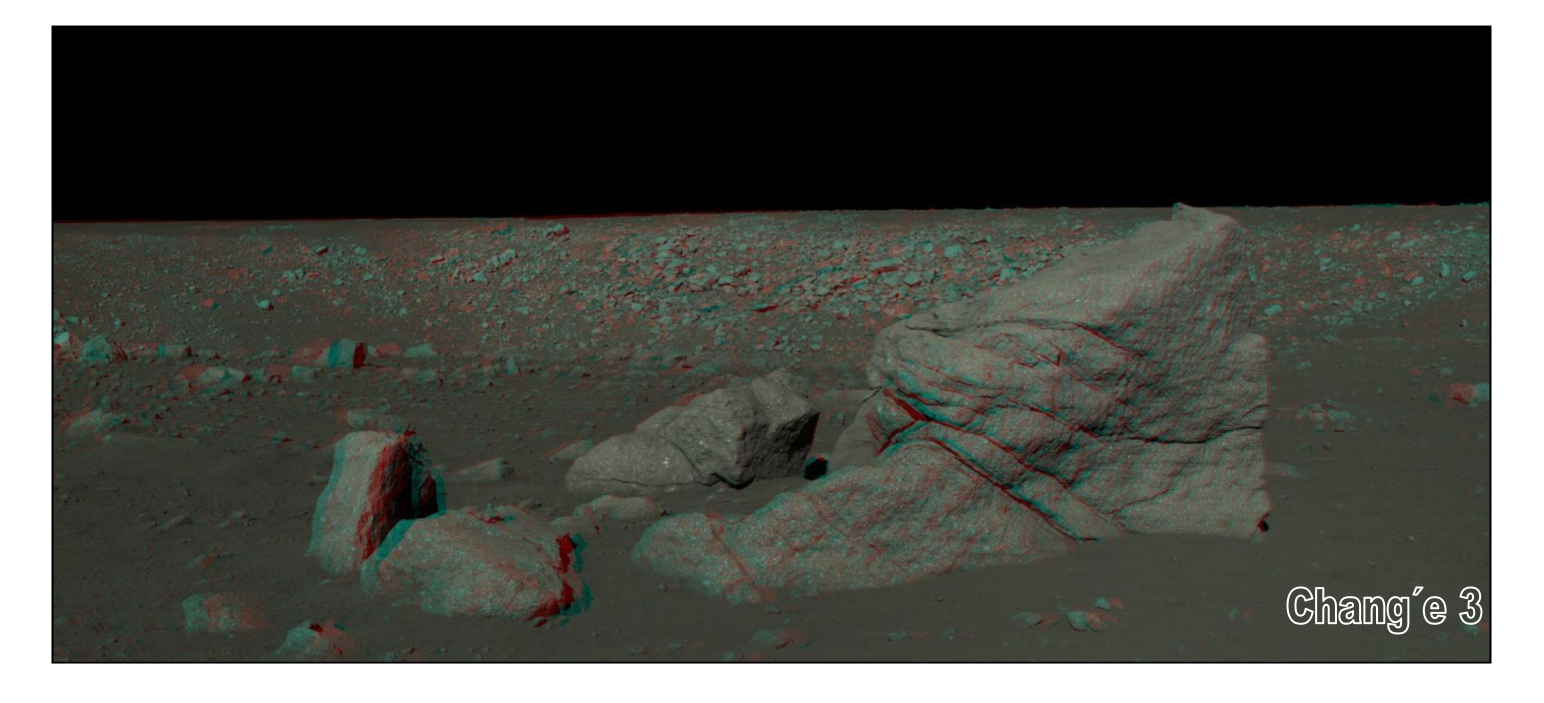
APOLLO-17

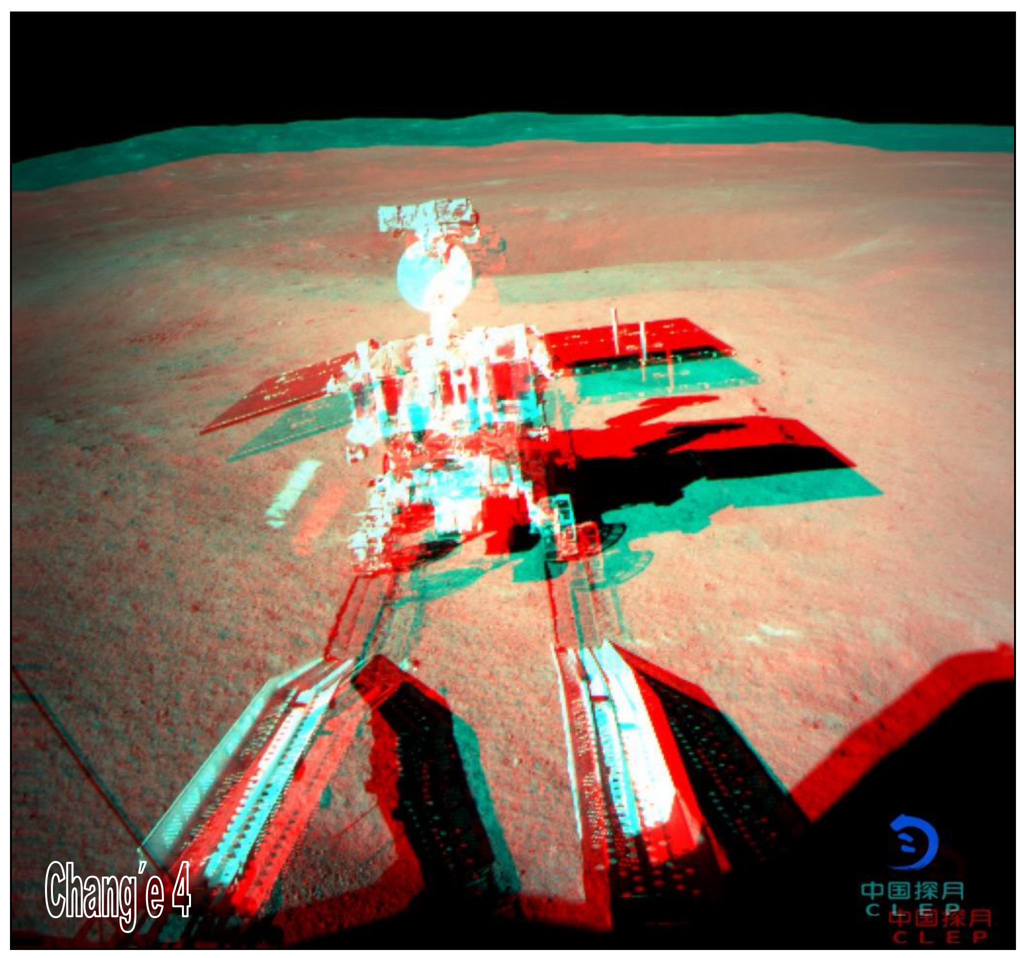


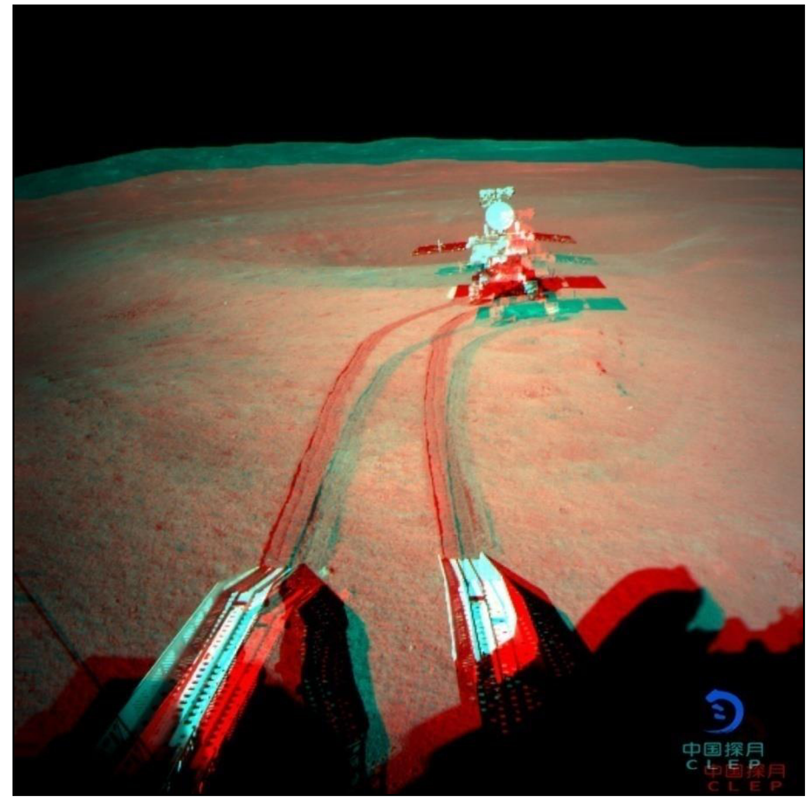
Apollo 12 - Surveyor III




Chang´e 3

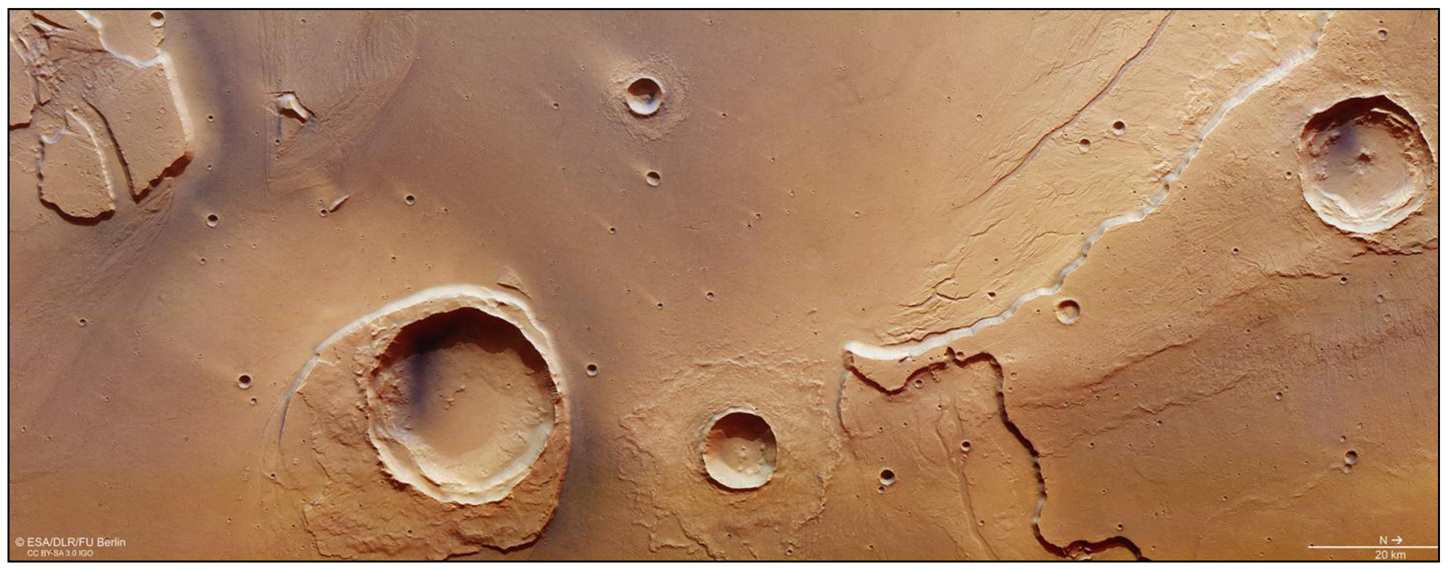

Chang´e 3

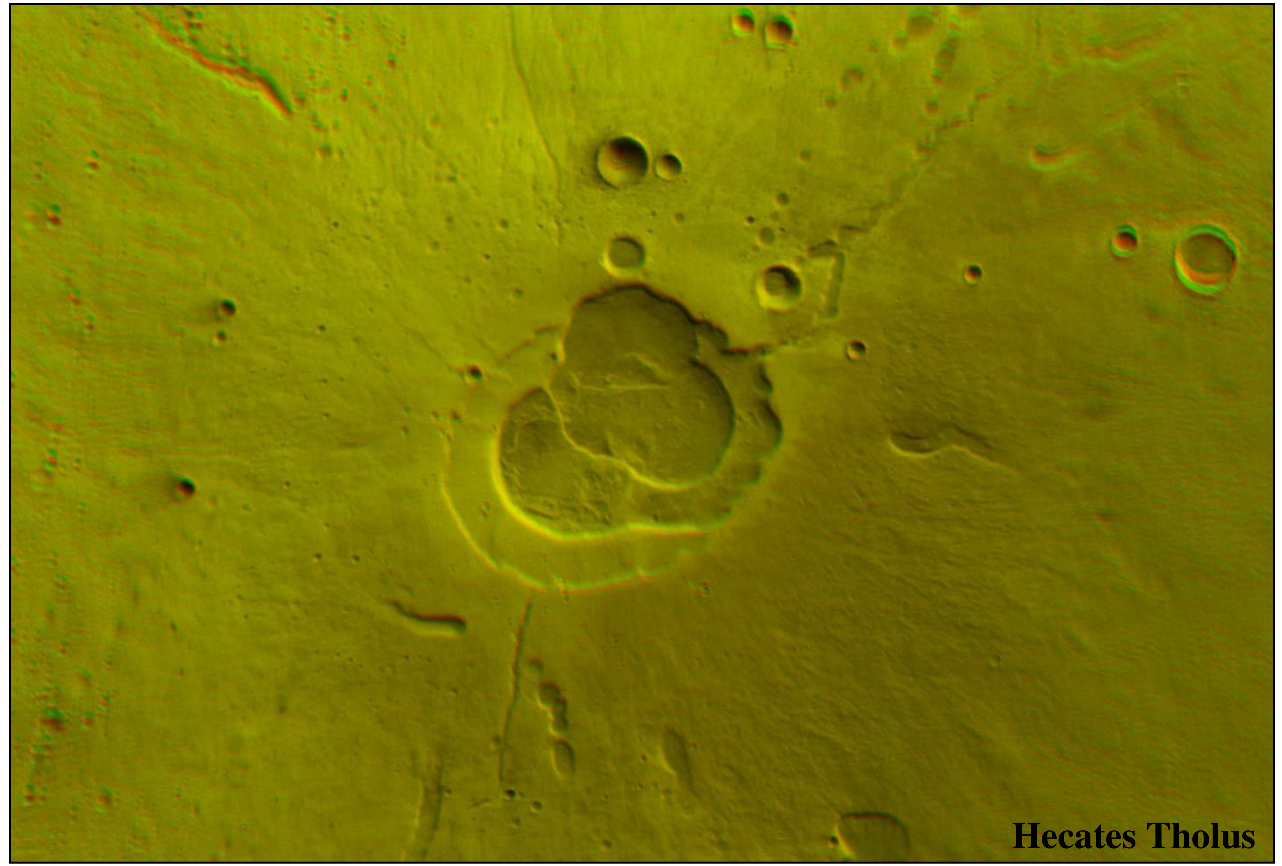

Chang´e 4
中国探月
CLEP


中国探月
CLEP

Marte

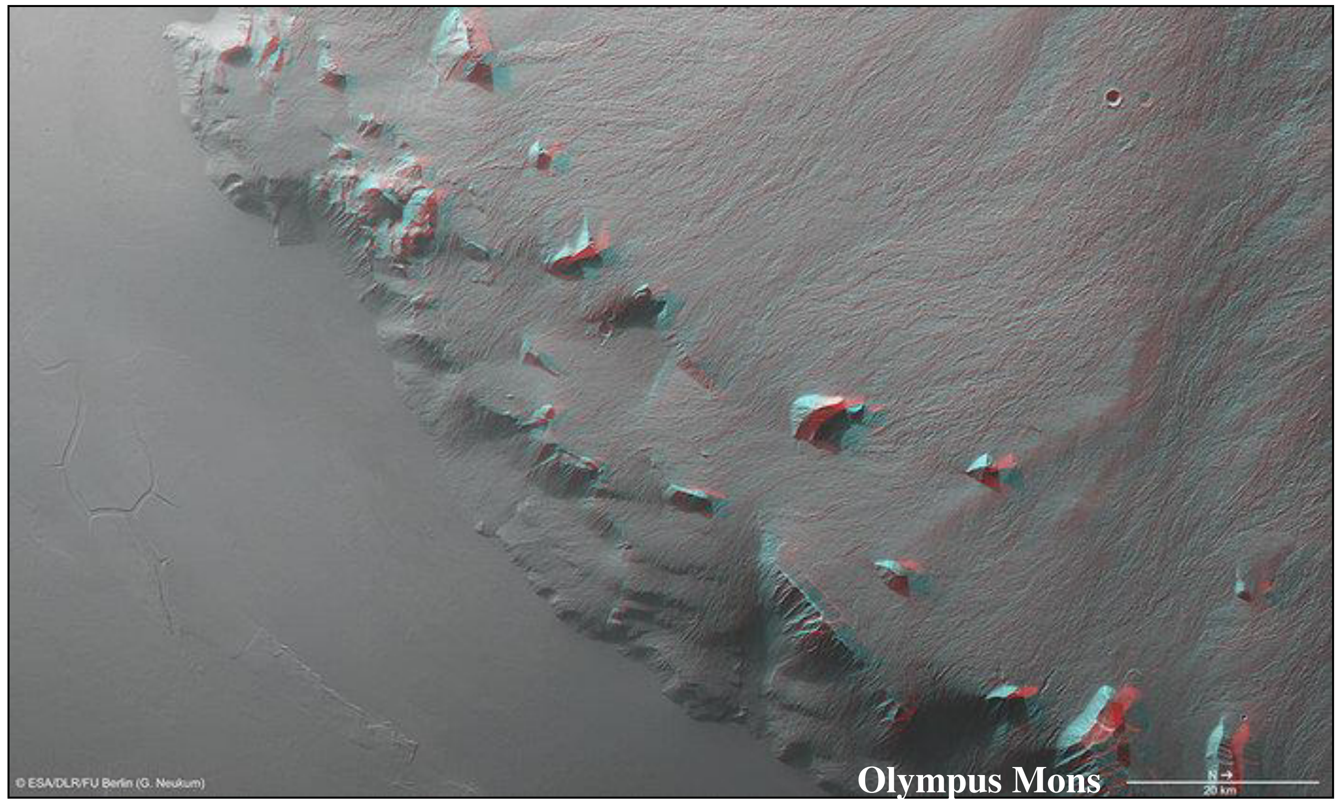
←N
10 km
Charitas Fossae



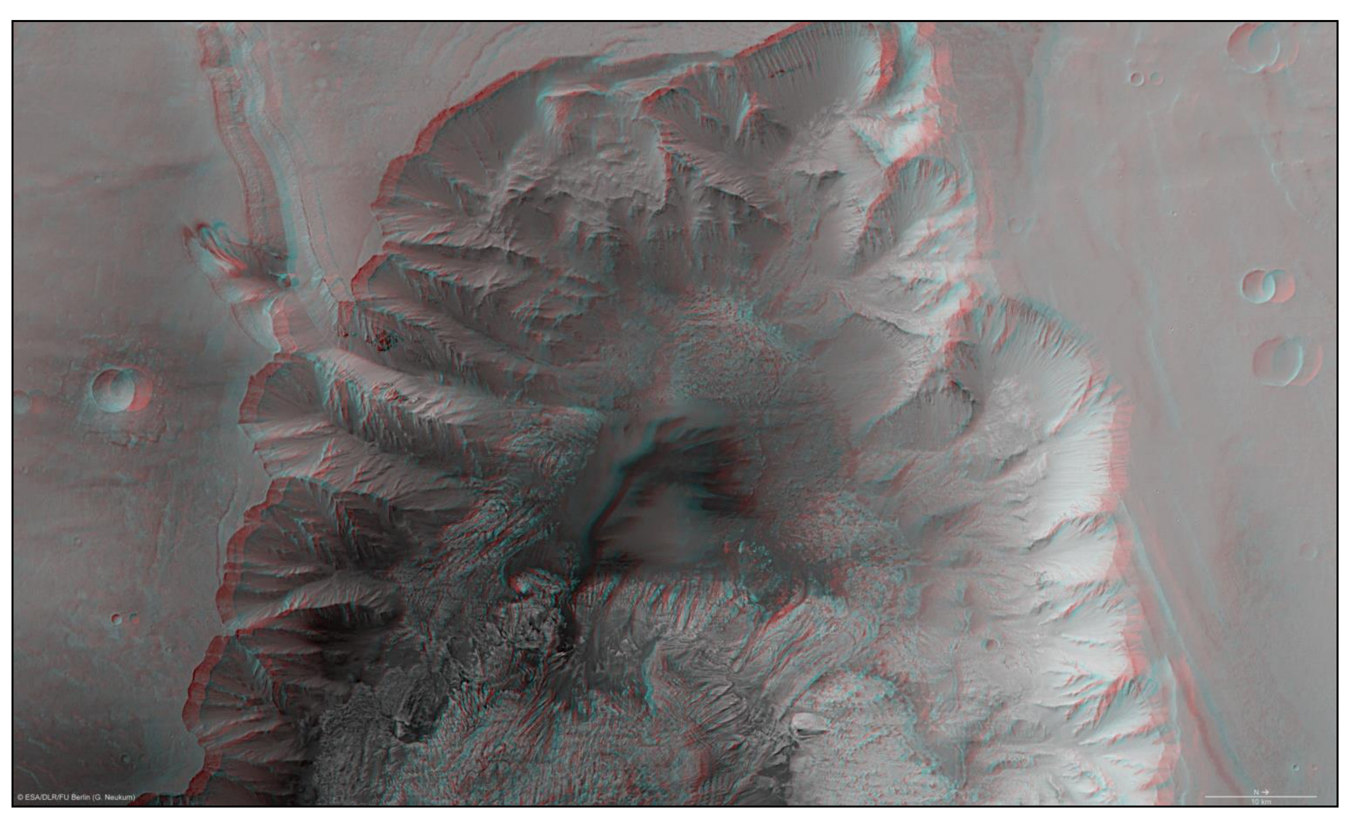

Hecates Tholus

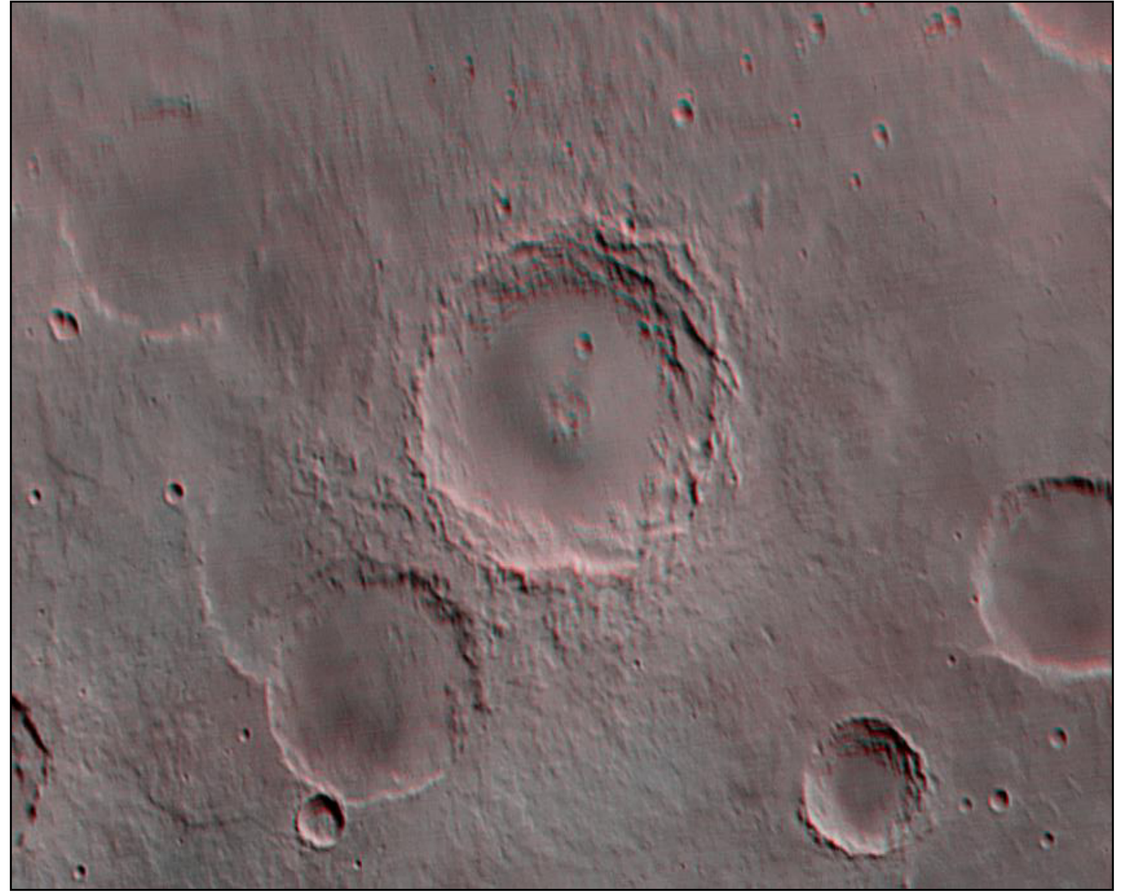
N→
10 km
Louros Vallis

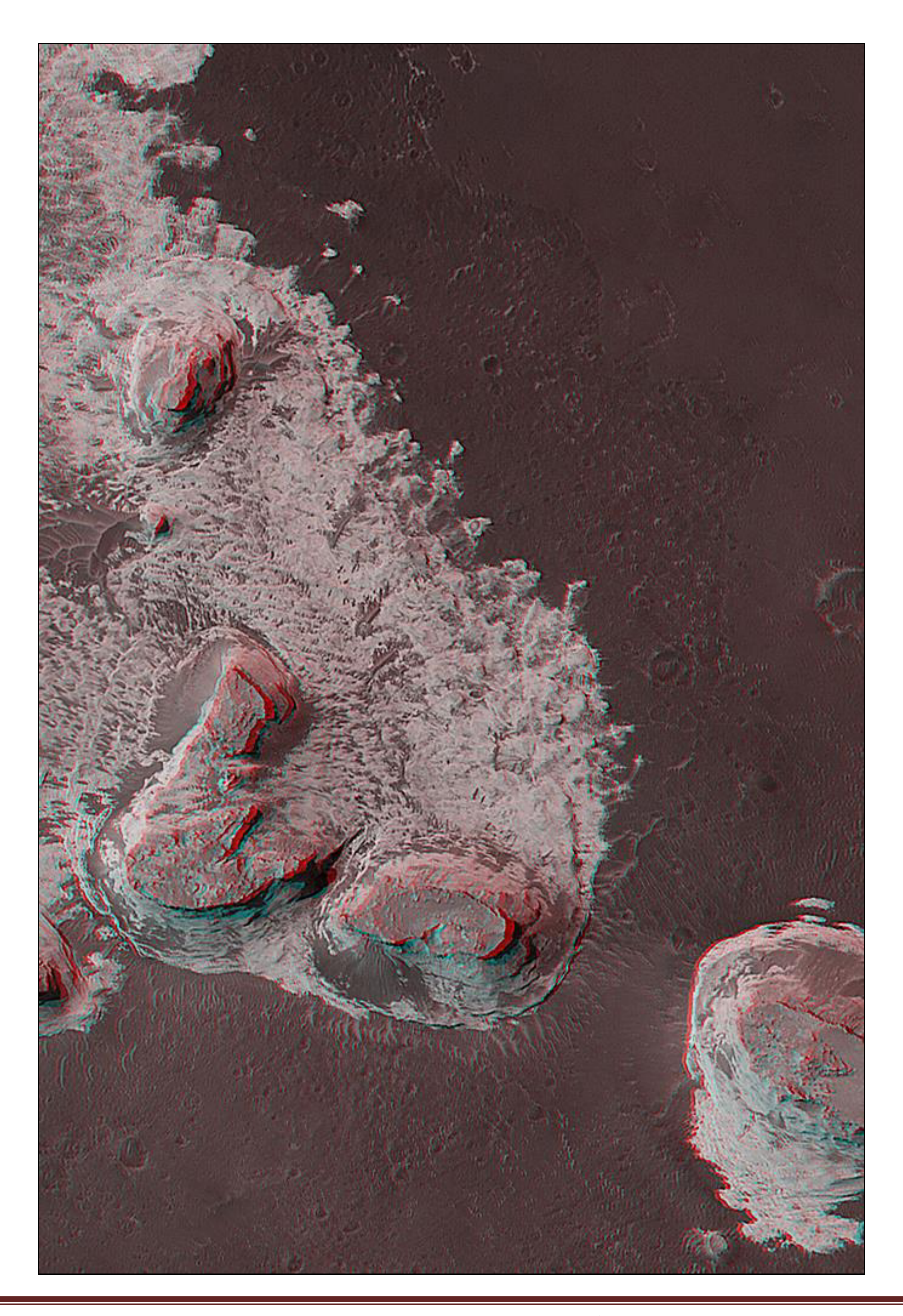
SA/DLR/FU Berlin (G. Neukum)
Candor Chasma
10 km



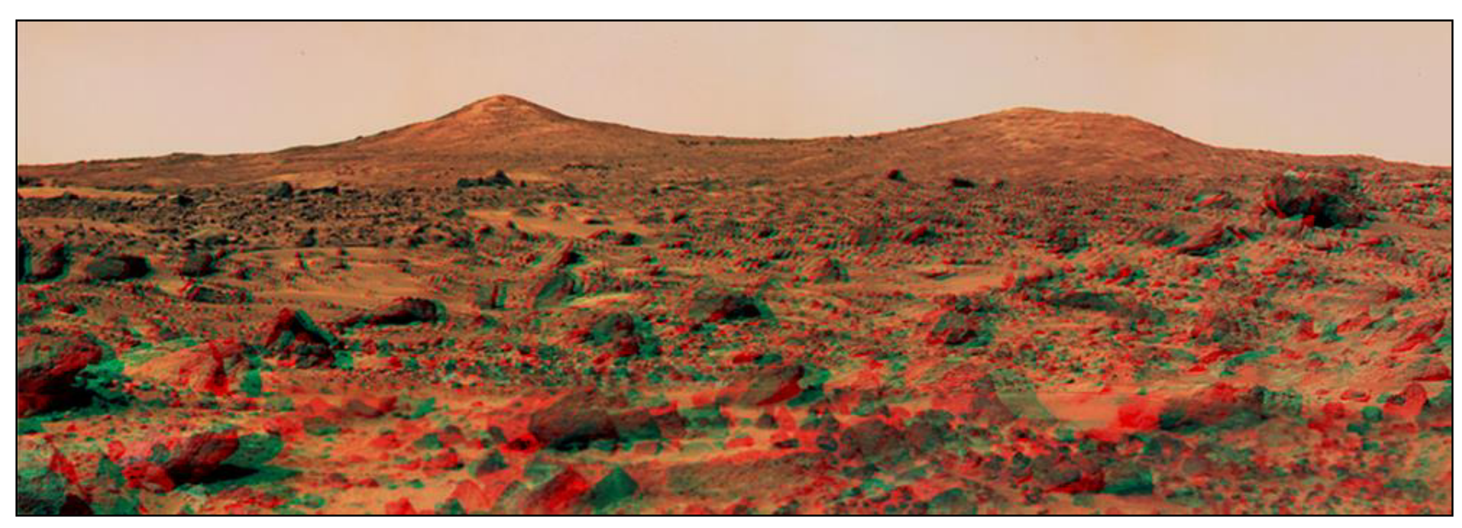
Olympus Mons

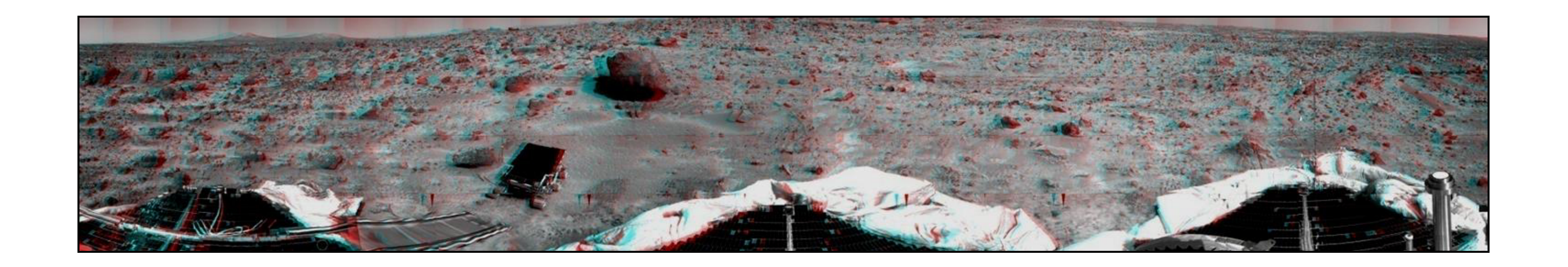

© ESA/DLR/FU Berlin (G. Neukum)

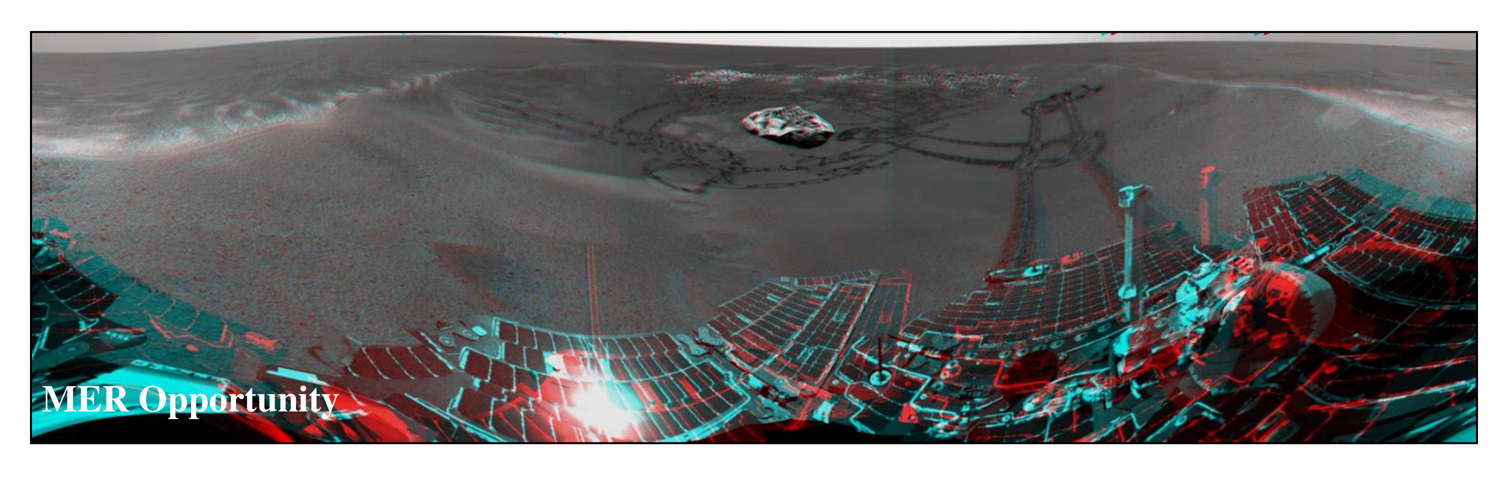


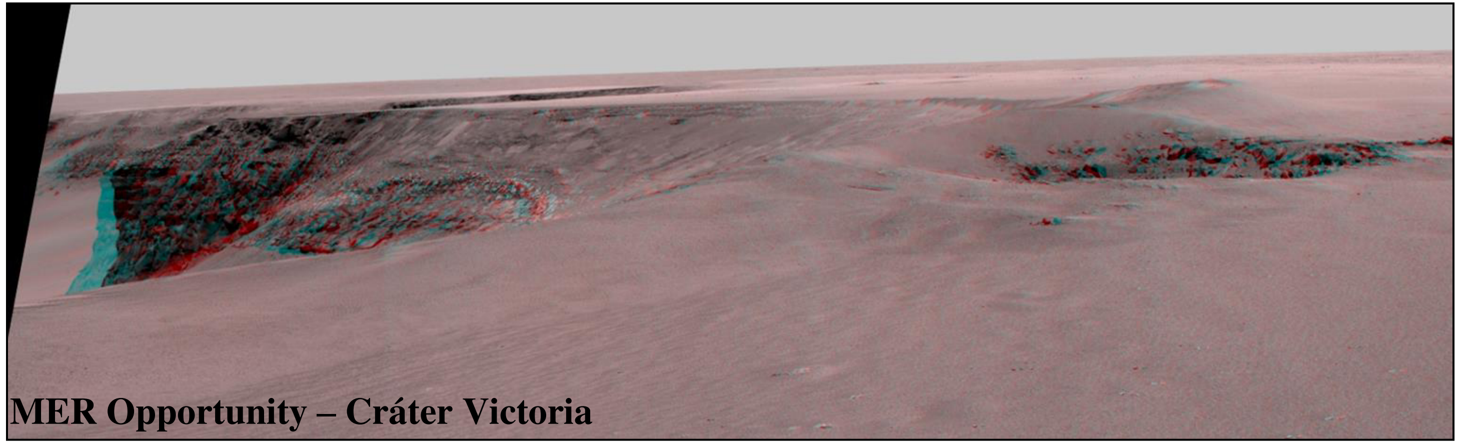


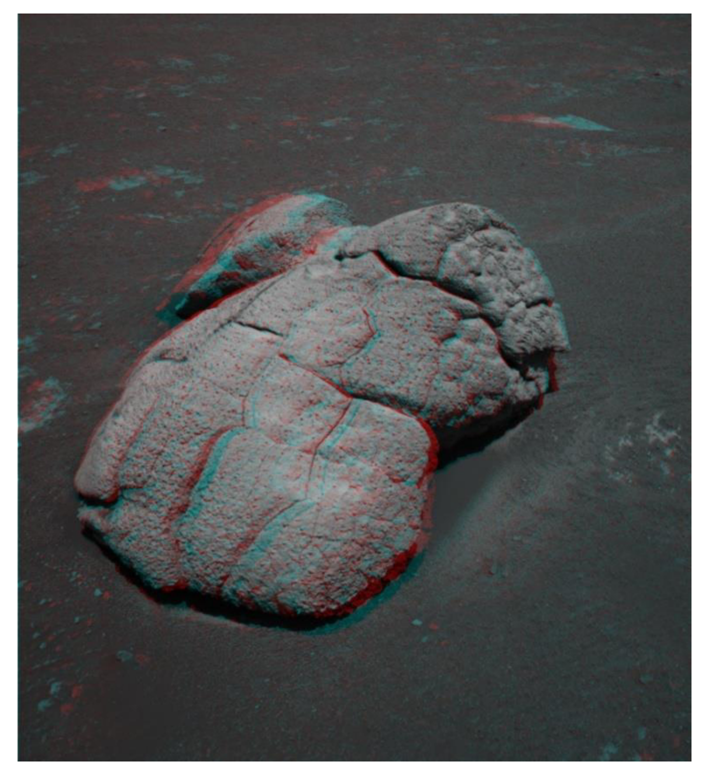
Mars Pathfinder

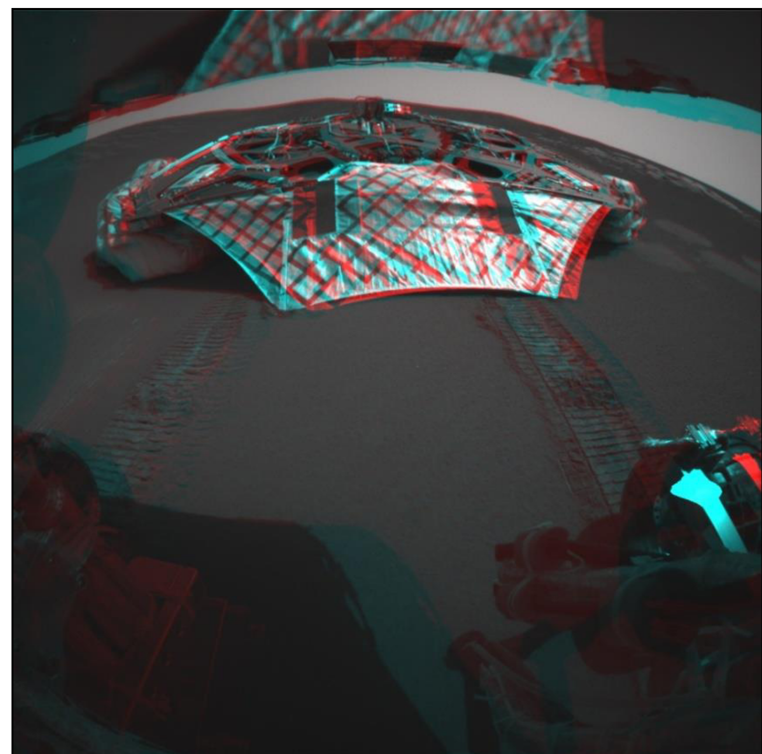


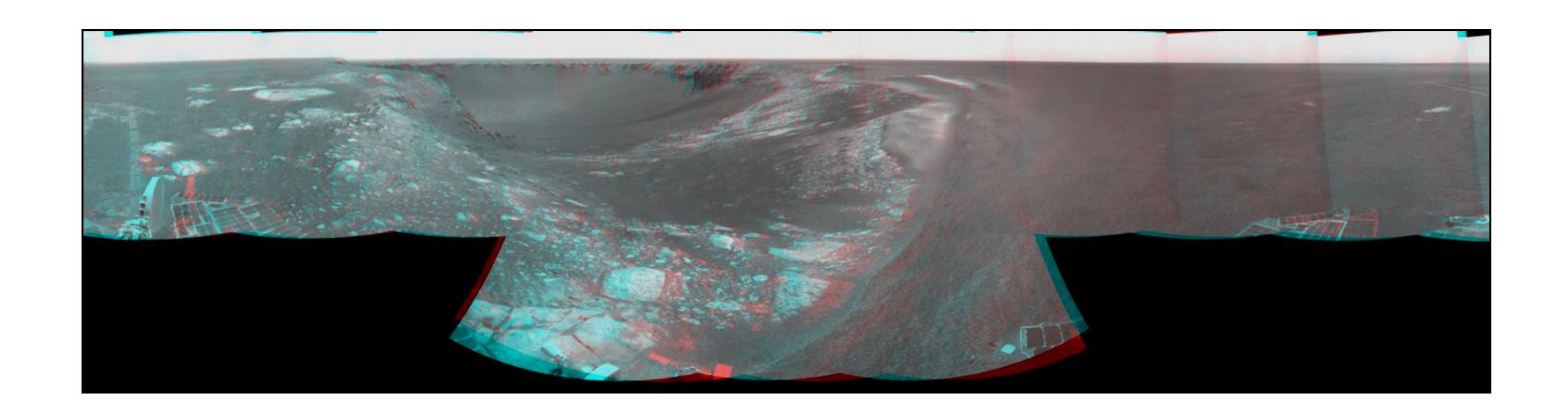


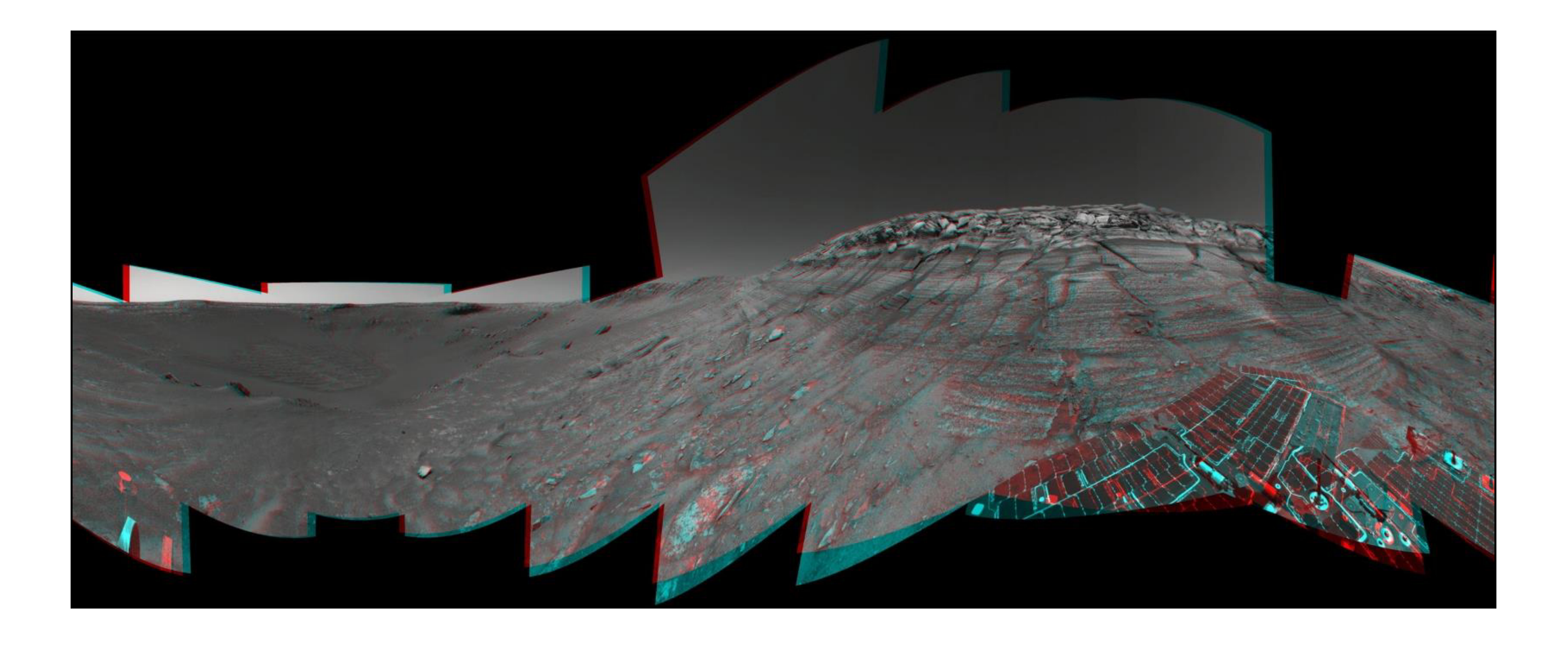

MER Opportunity

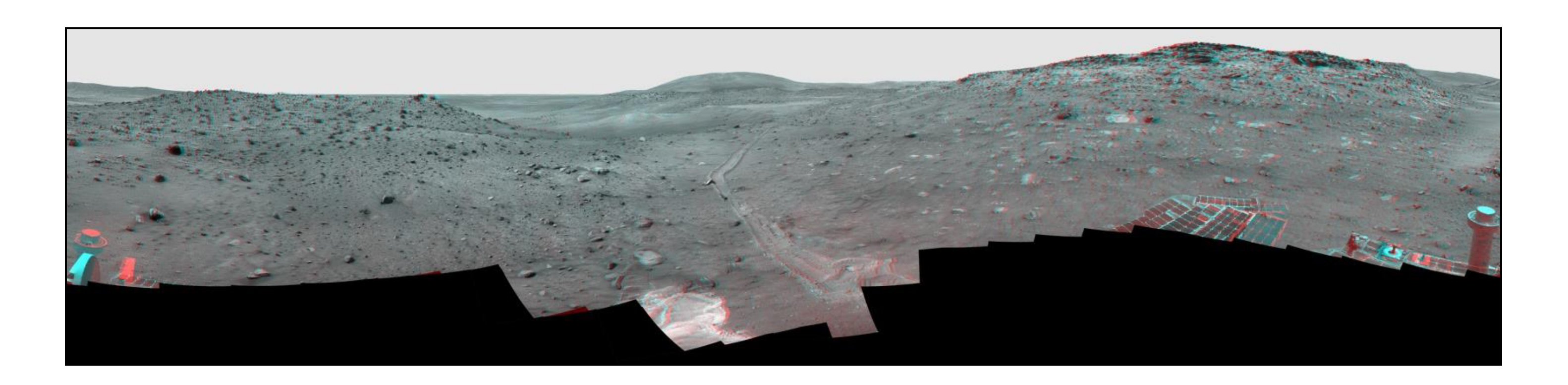

MER Opportunity – Cráter Victoria

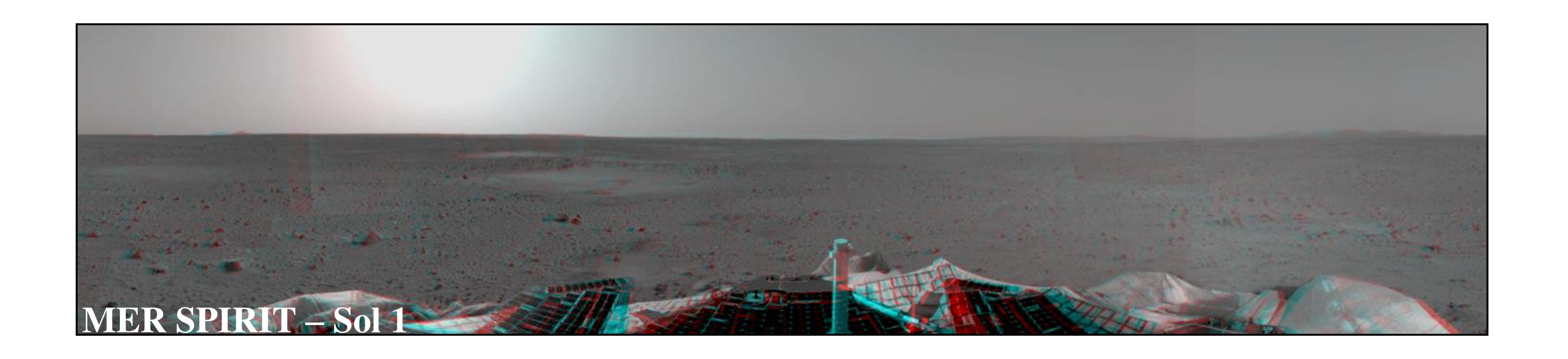


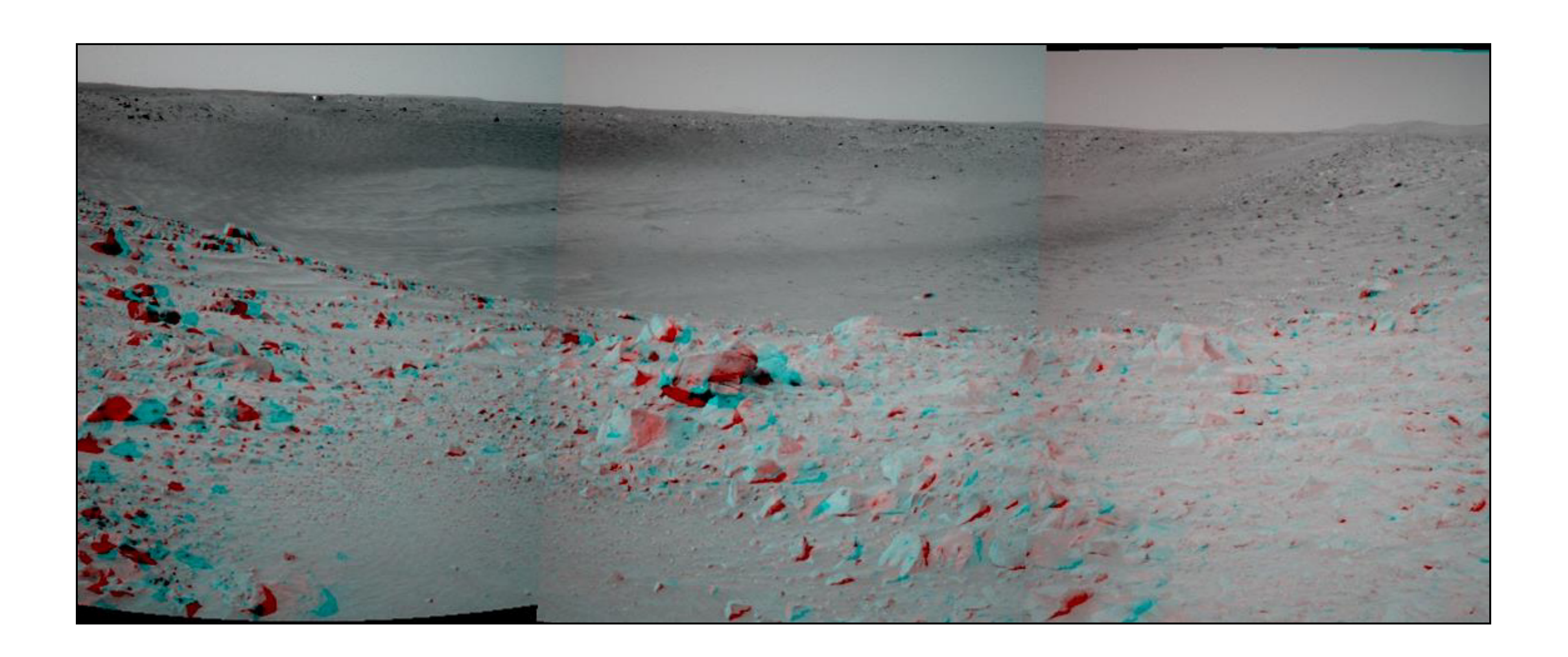


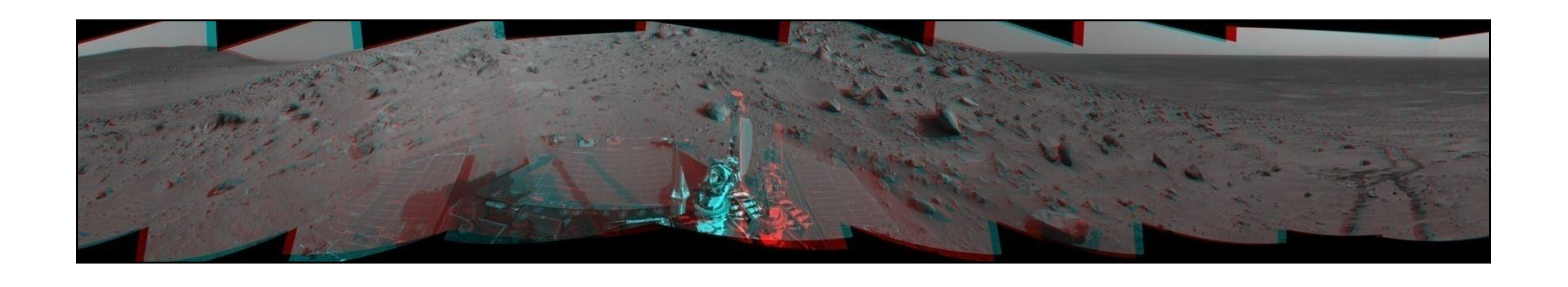


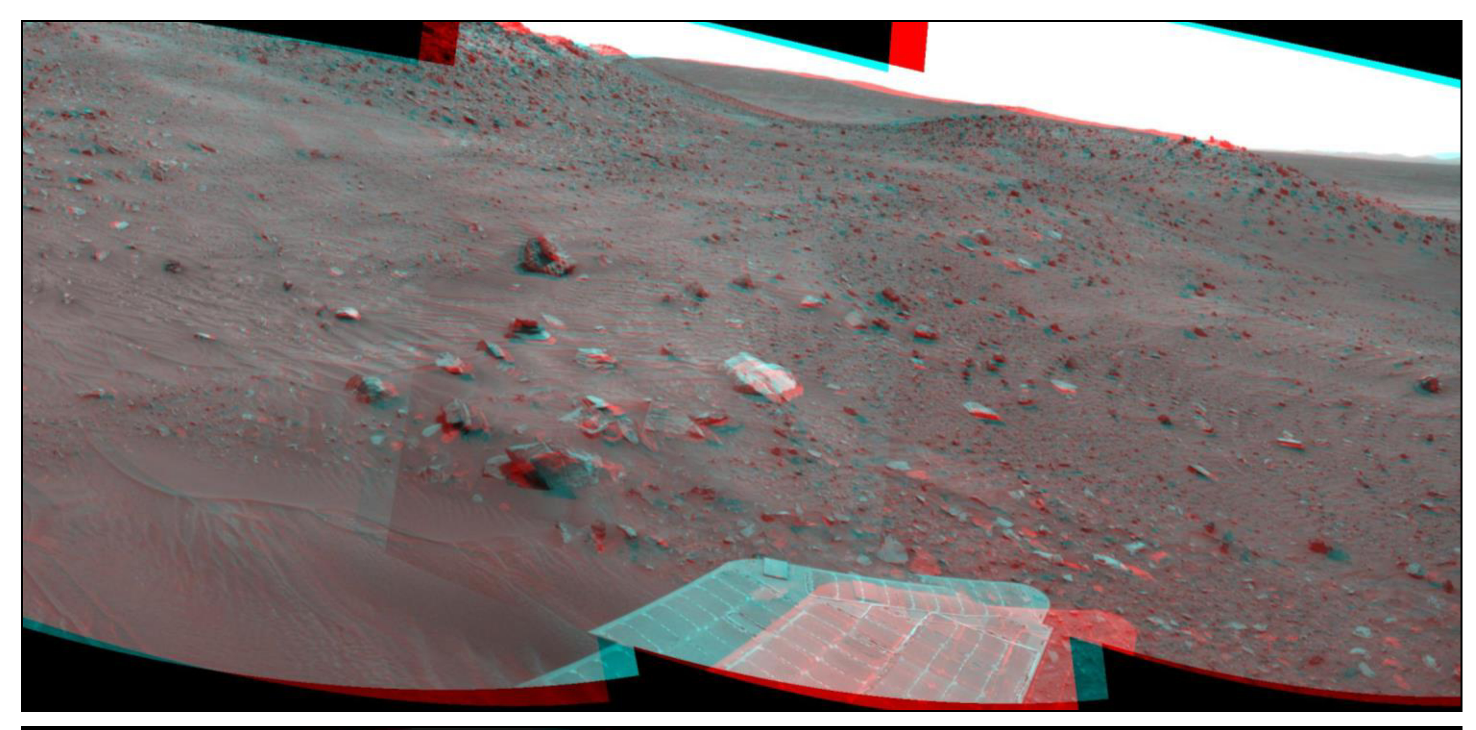


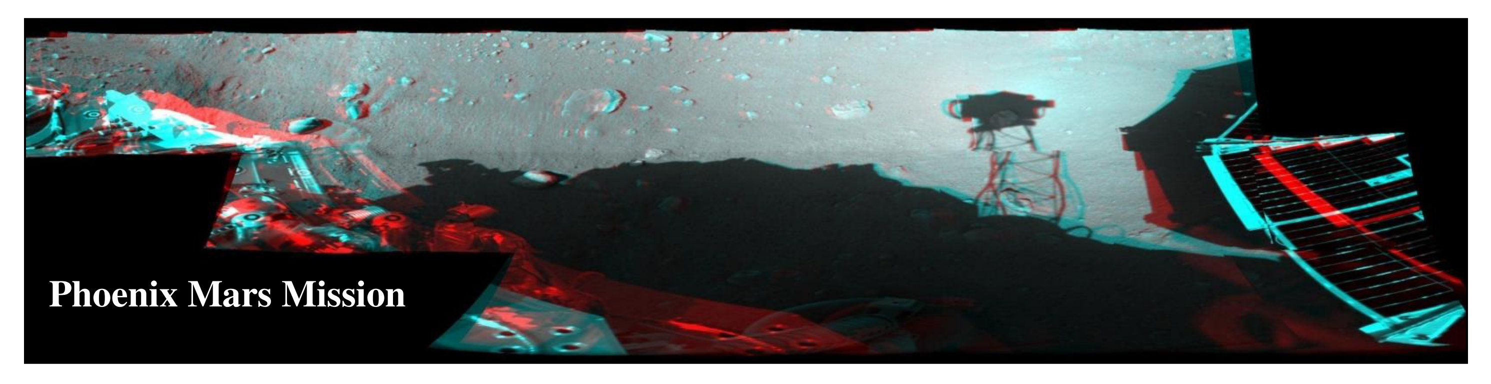


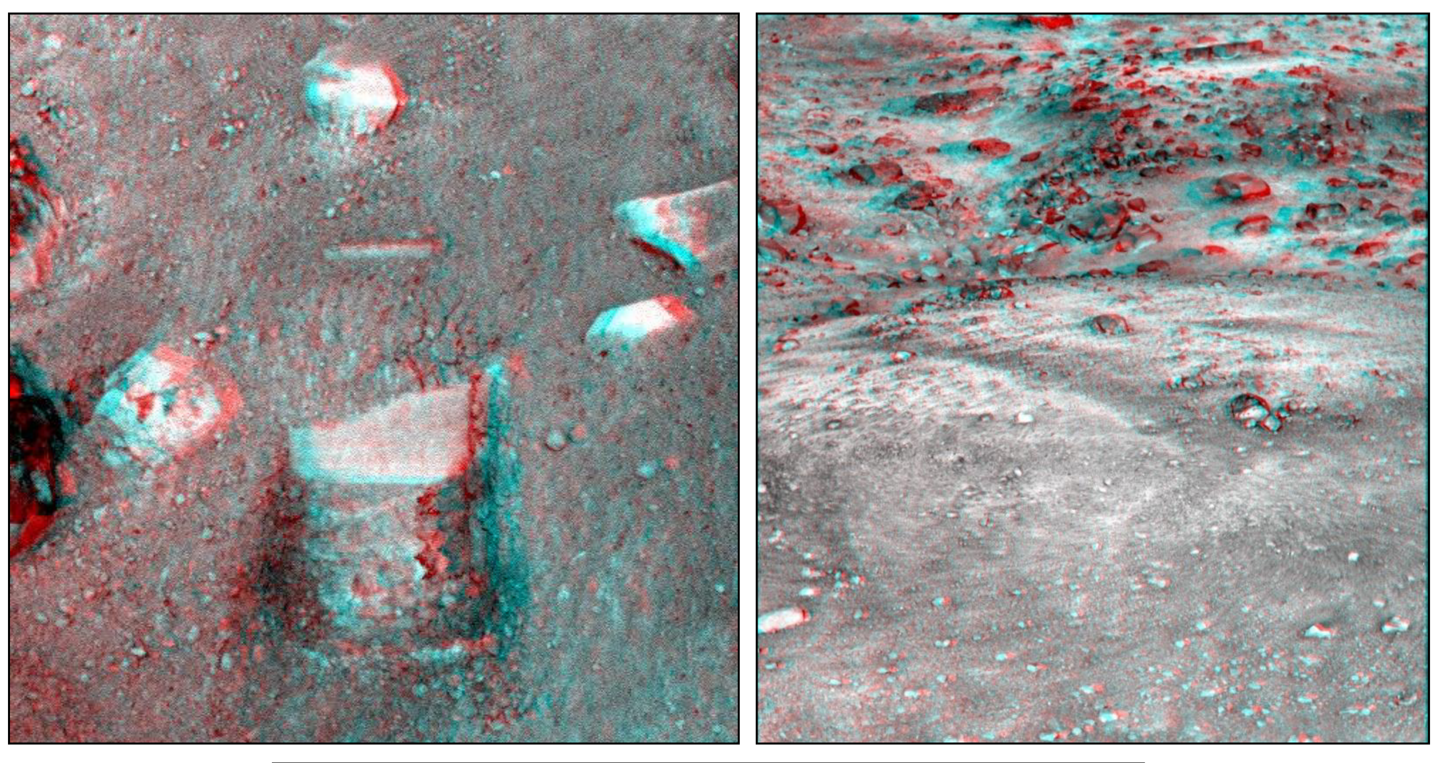

MER SPIRIT – Sol 1

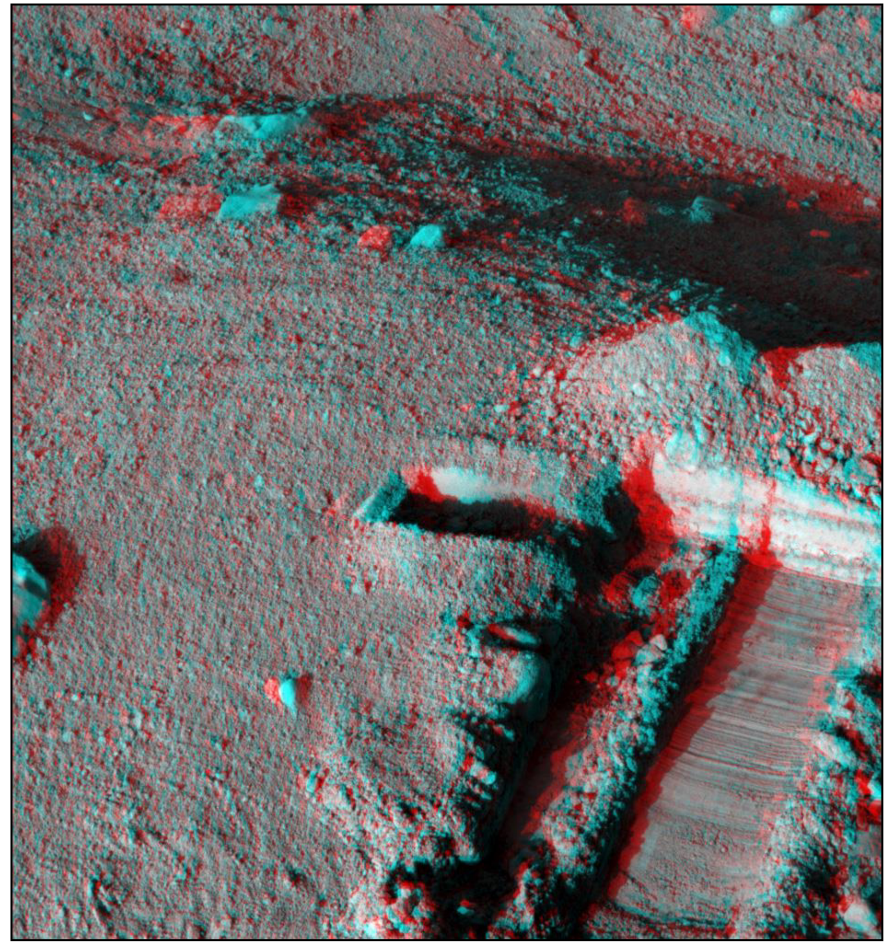


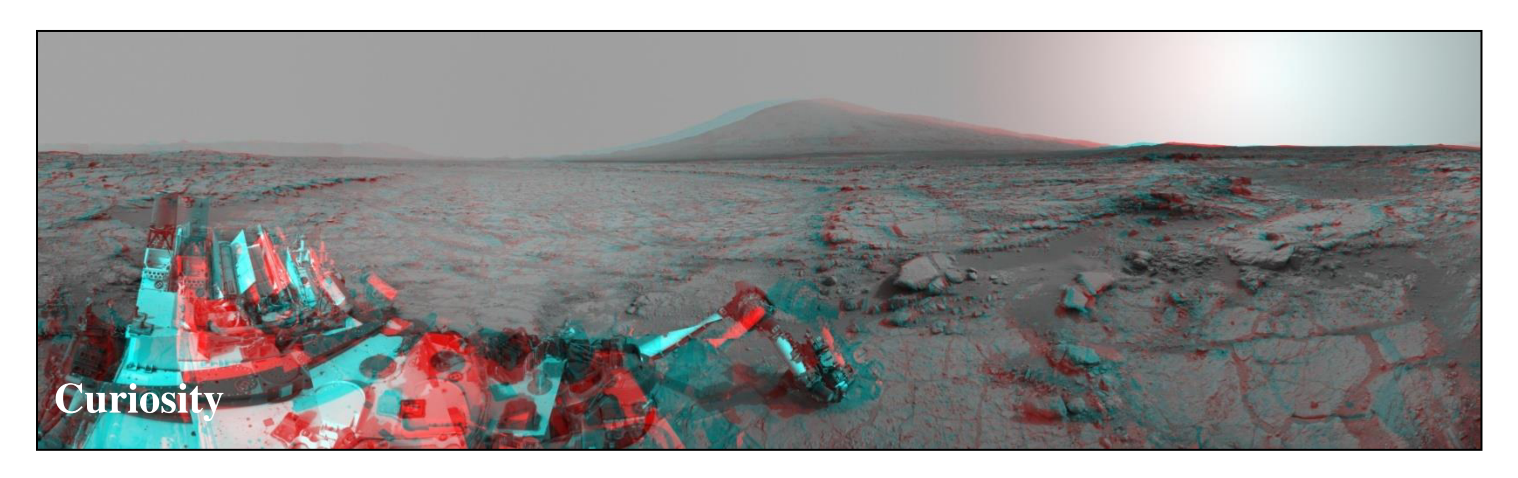


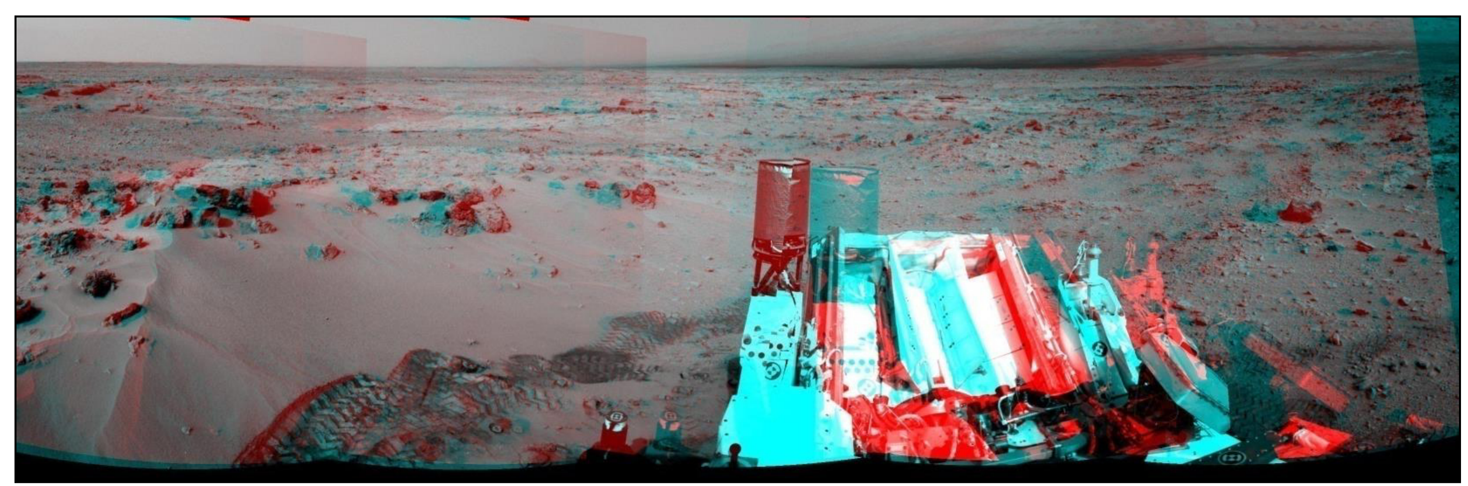


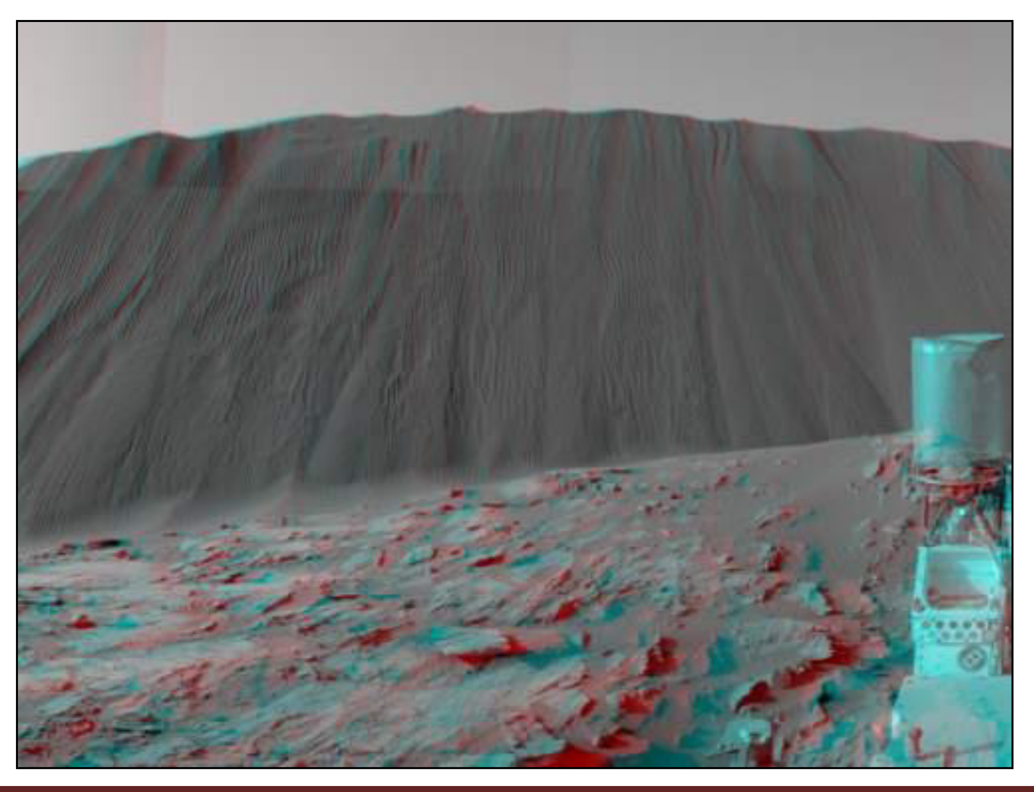

Phoenix Mars Mission

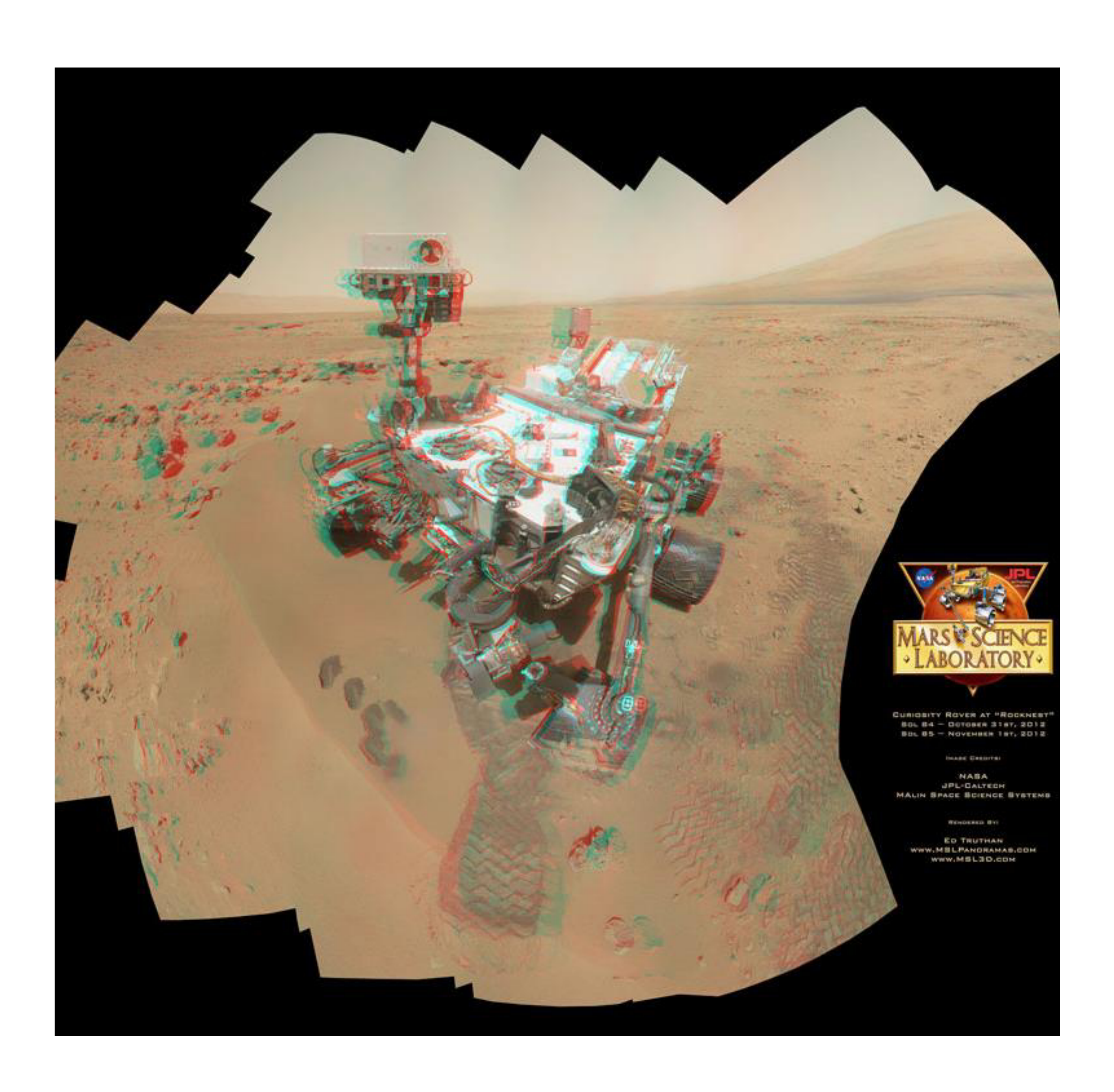




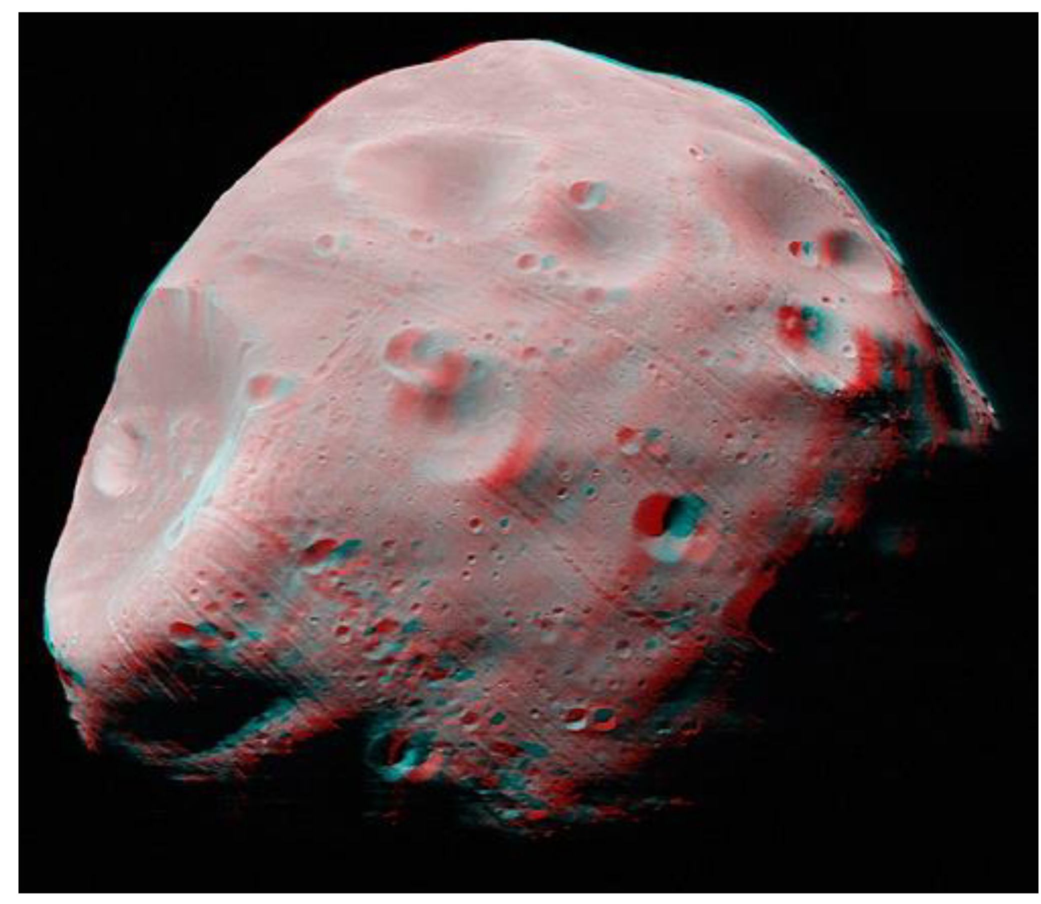

Curiosity

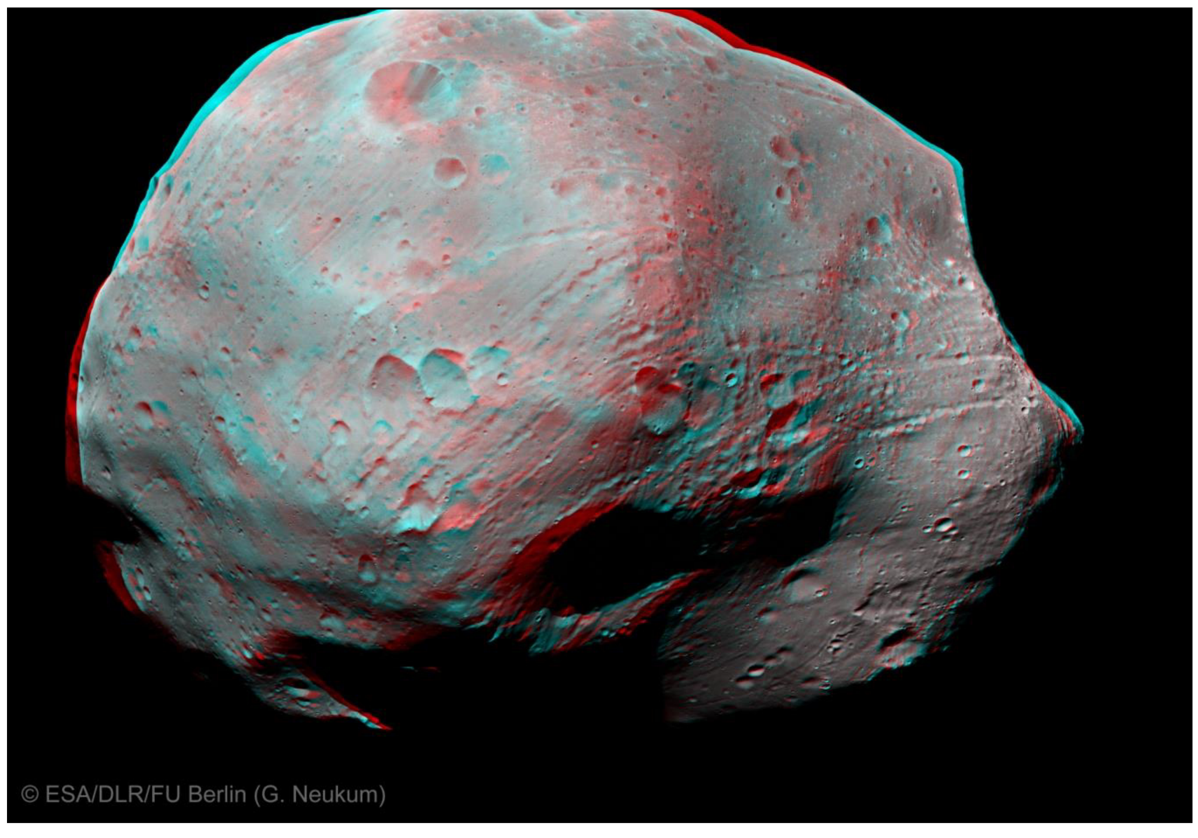


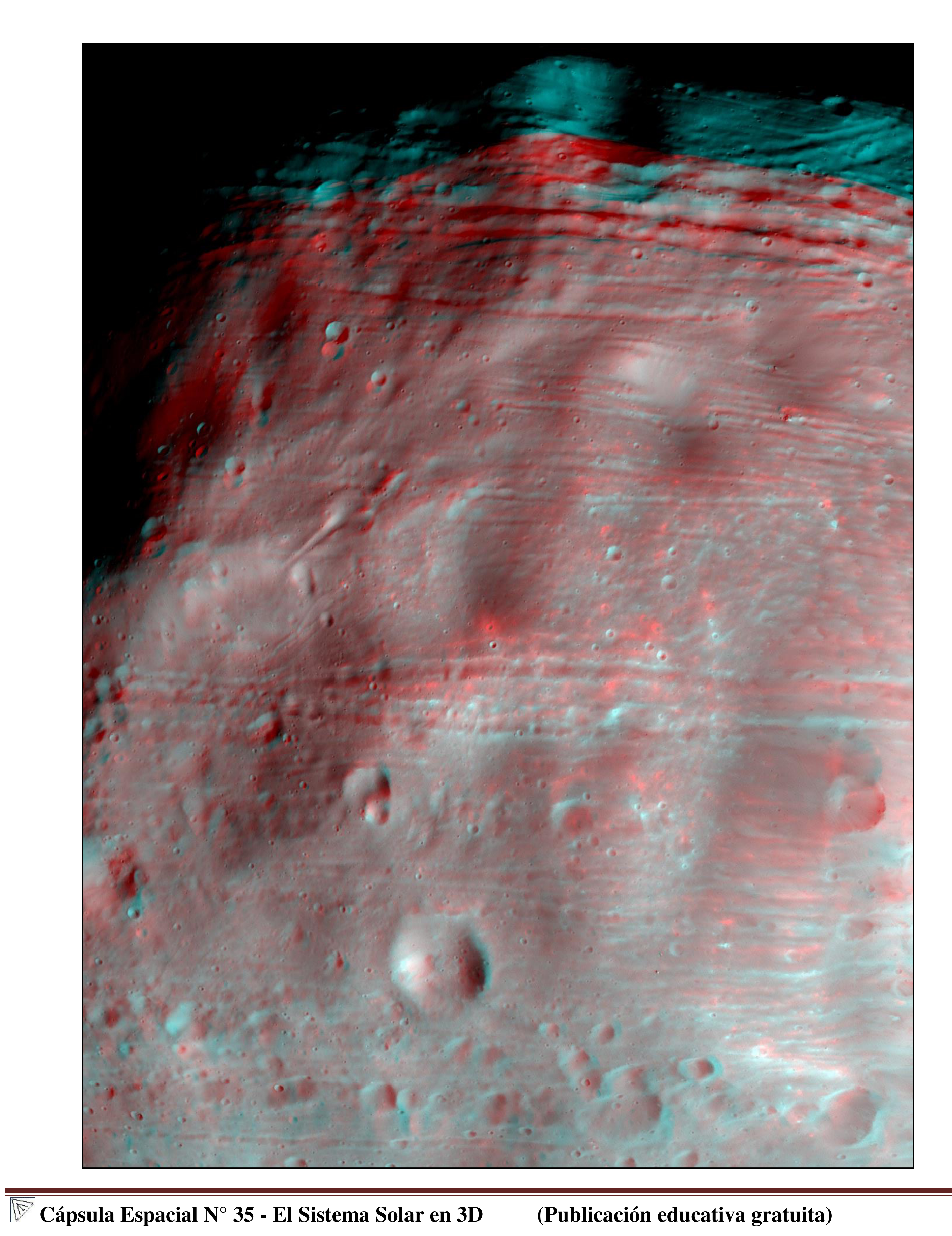



NASA
JPL
MARS SCIENCE LABORATORY
CURIOSITY ROVER AT "ROCKNEST"
SOL 84 — OCTOBER 31ST, 2012
SOL 85 — NOVEMBER 1ST, 2012
IMAGE CREDITS:
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JPL-CALTECH
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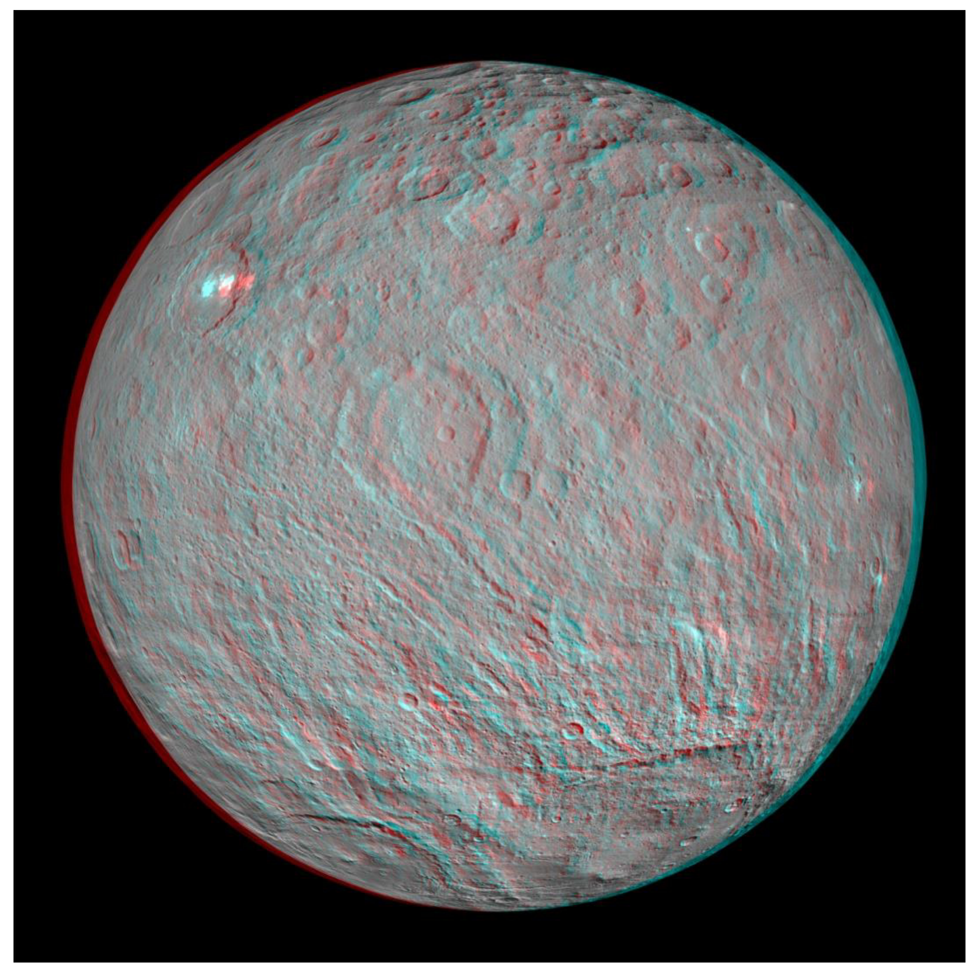
Phobos

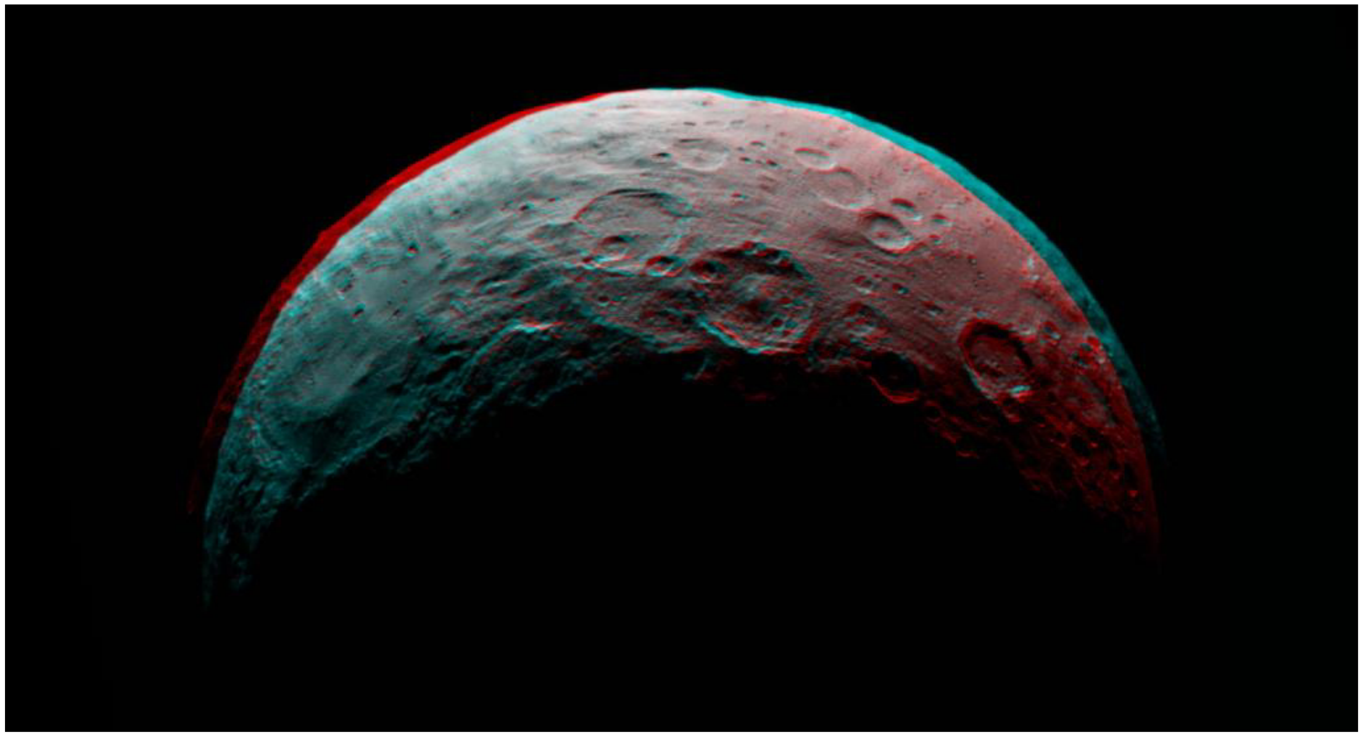


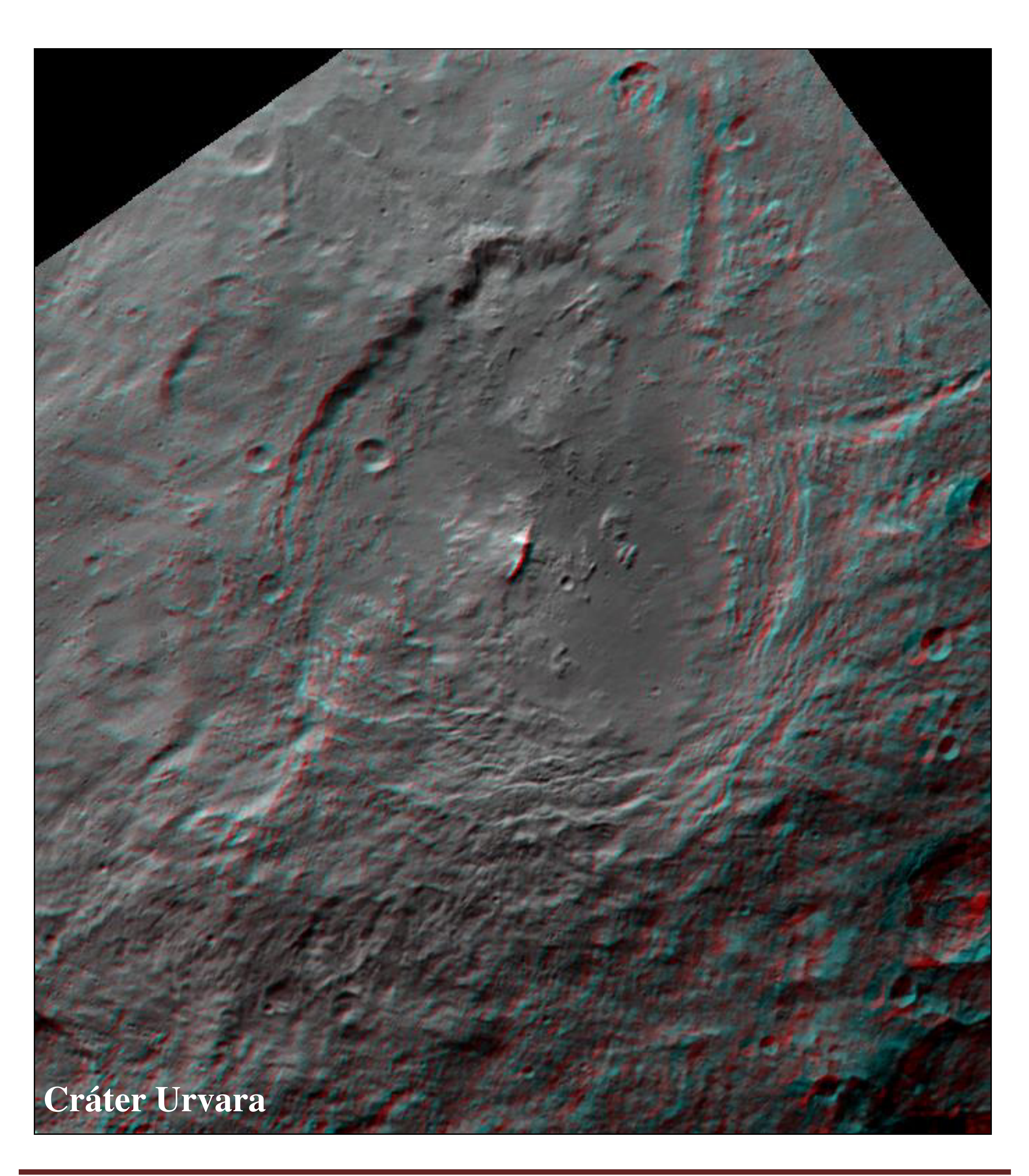




Ceres

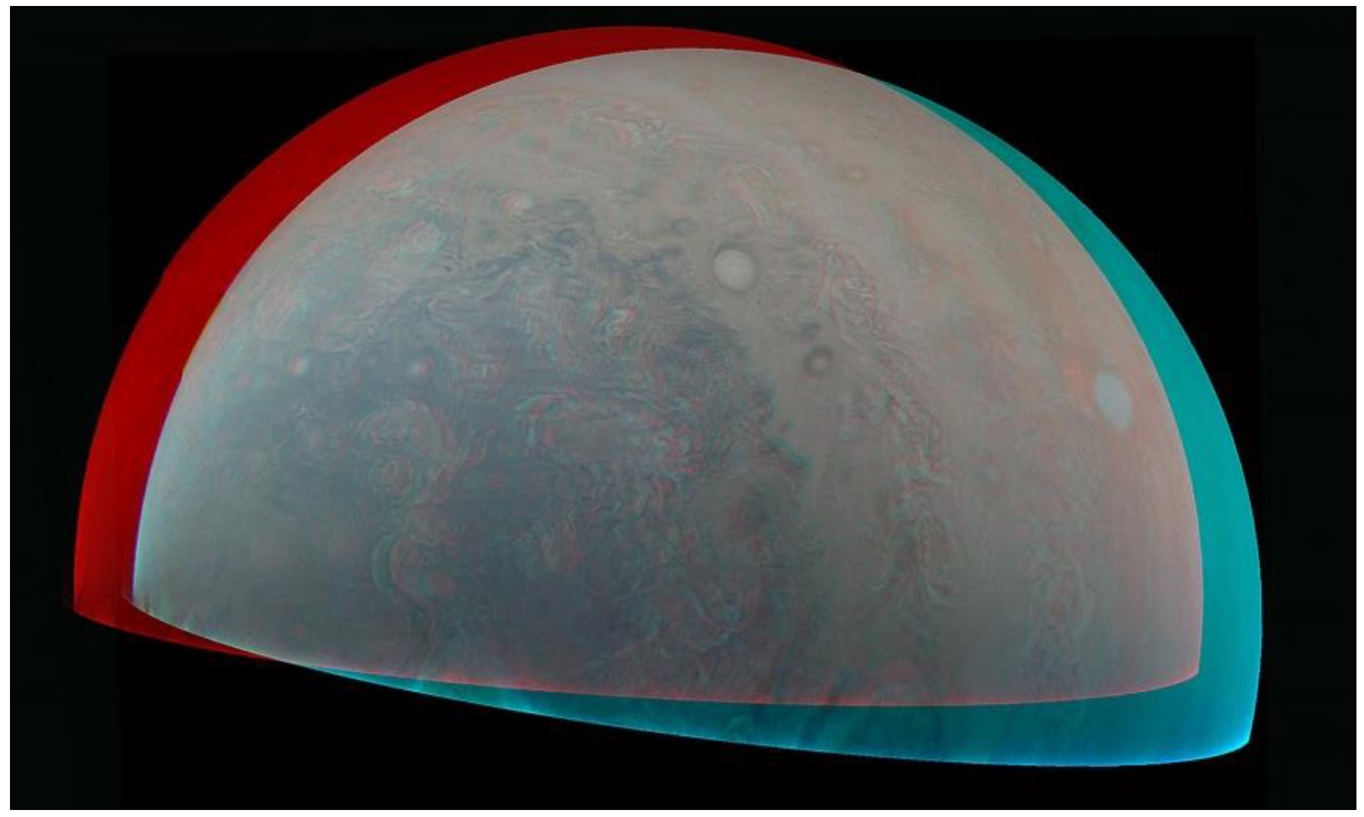




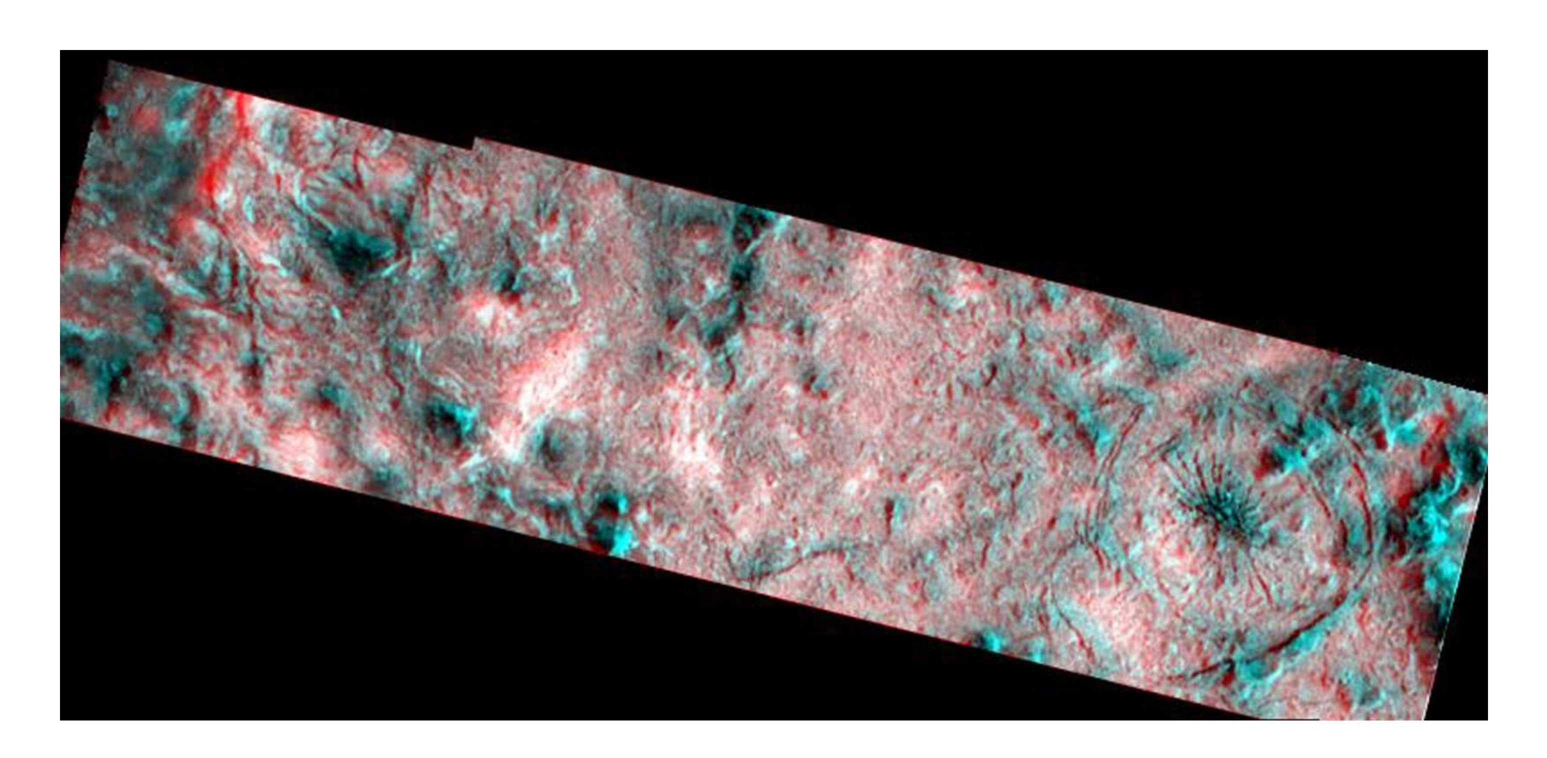

Cráter Urvara

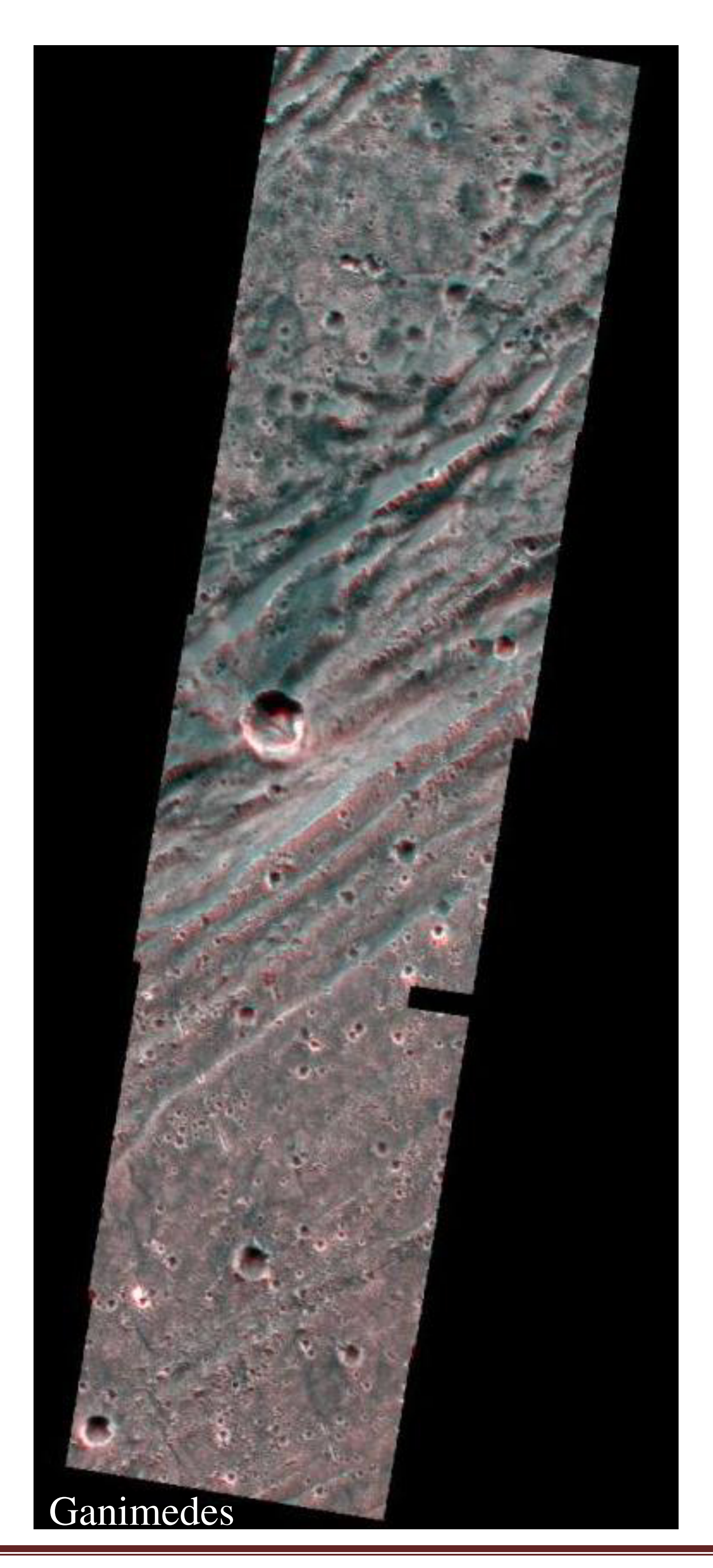
Júpiter

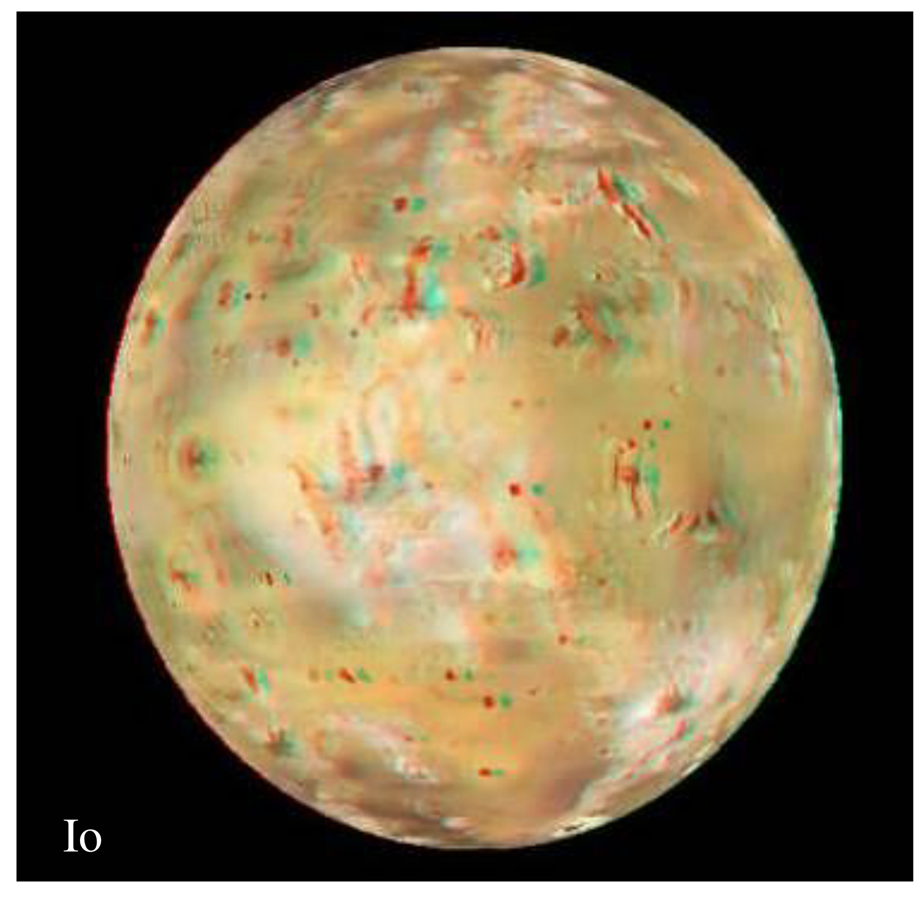




Europa

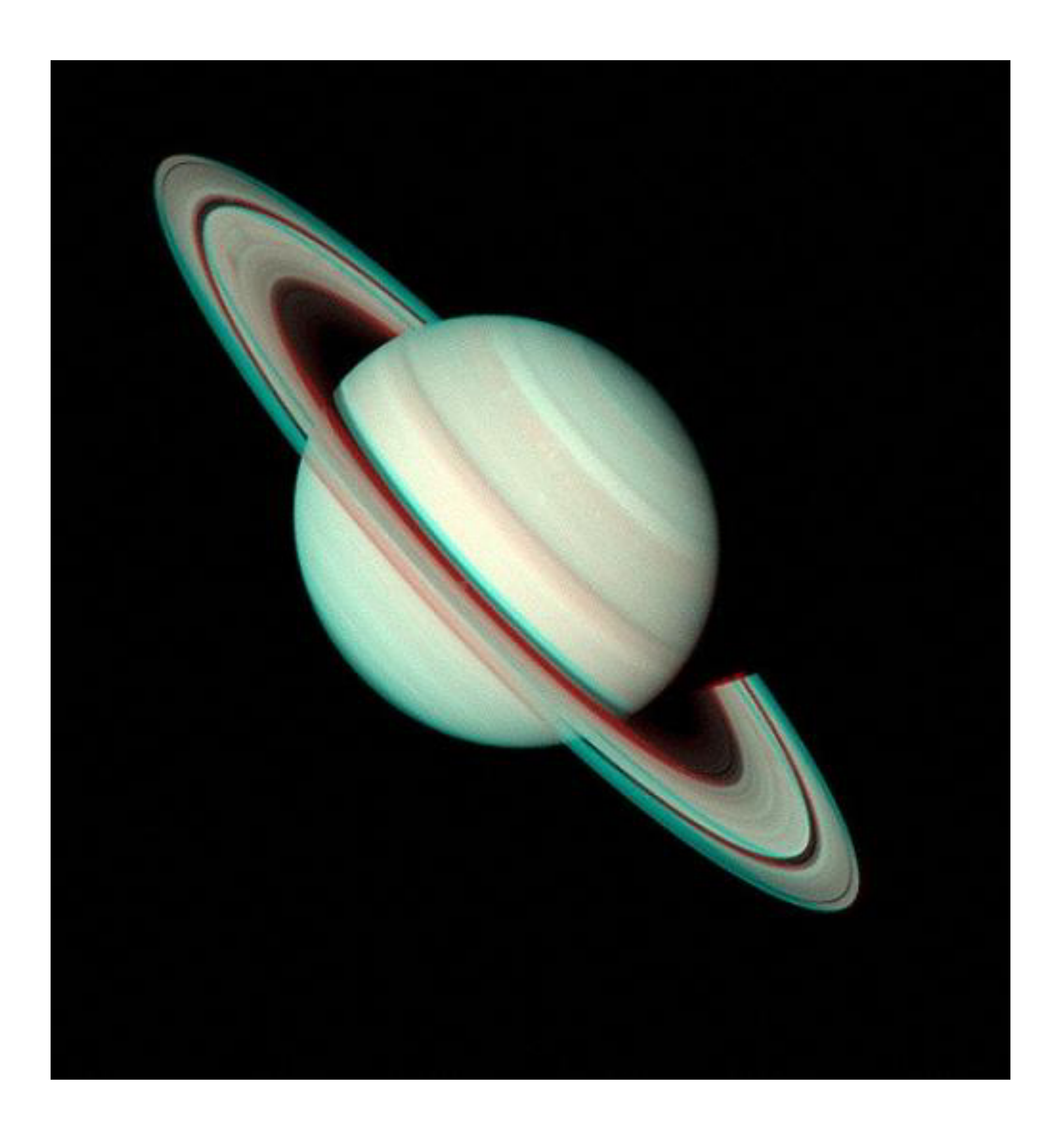


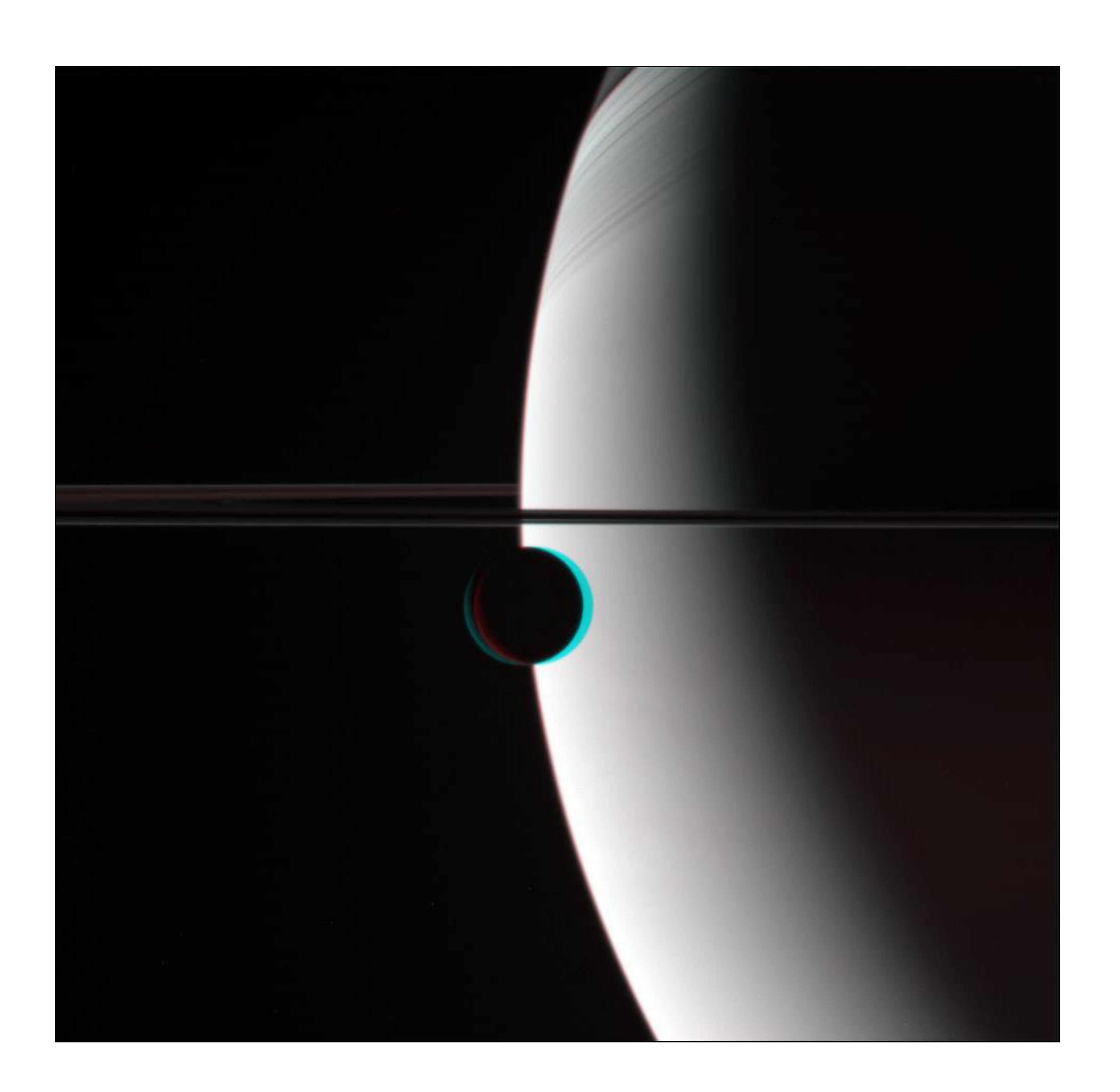

Ganimedes


Io

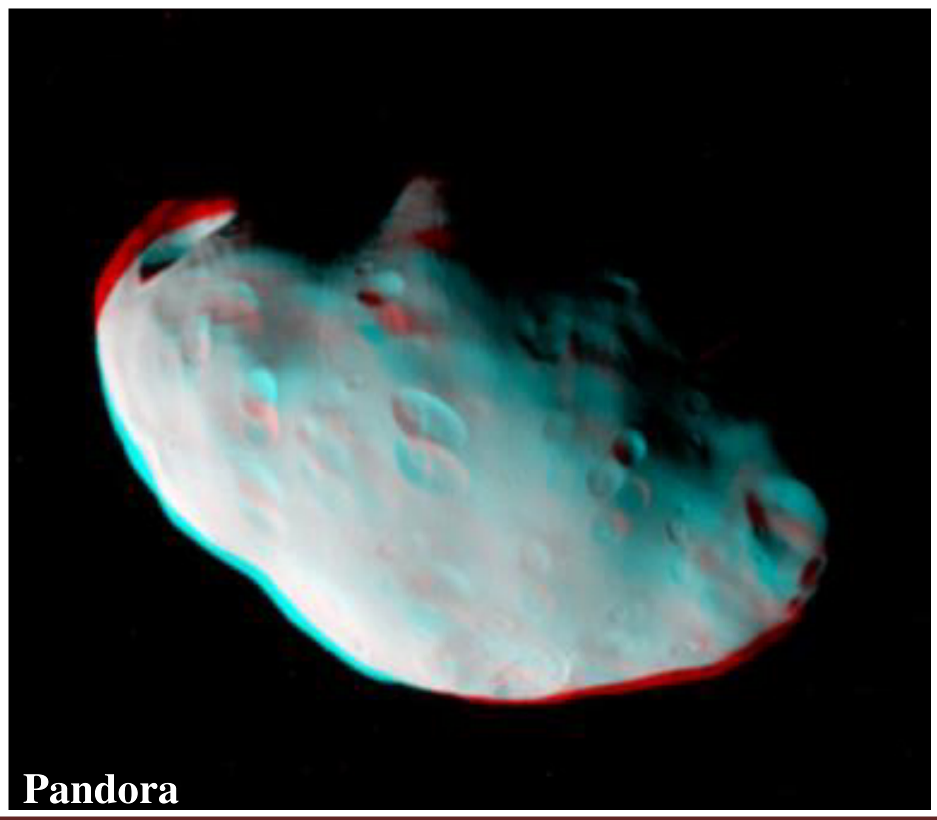


Saturno

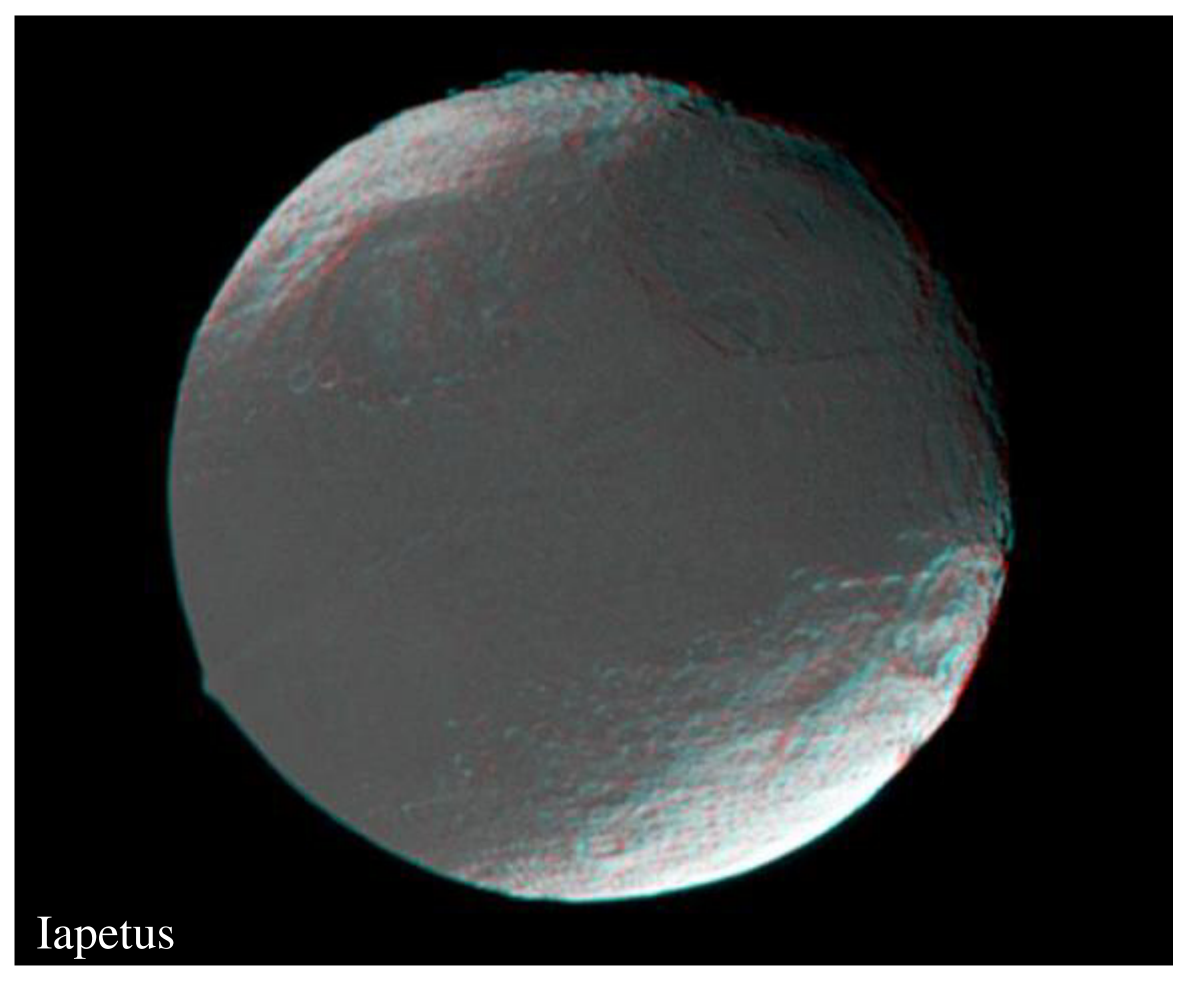


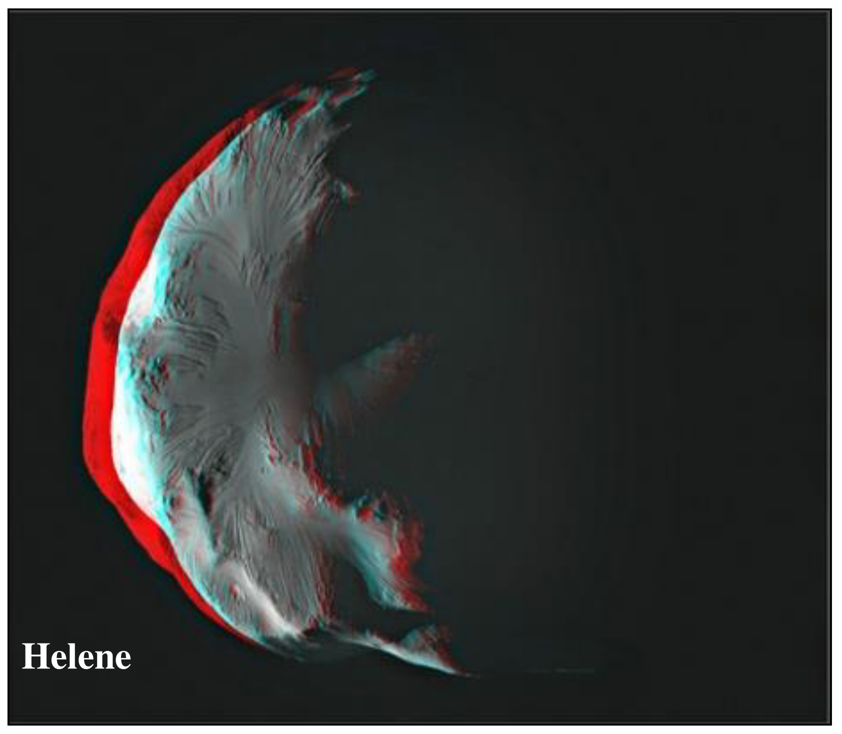


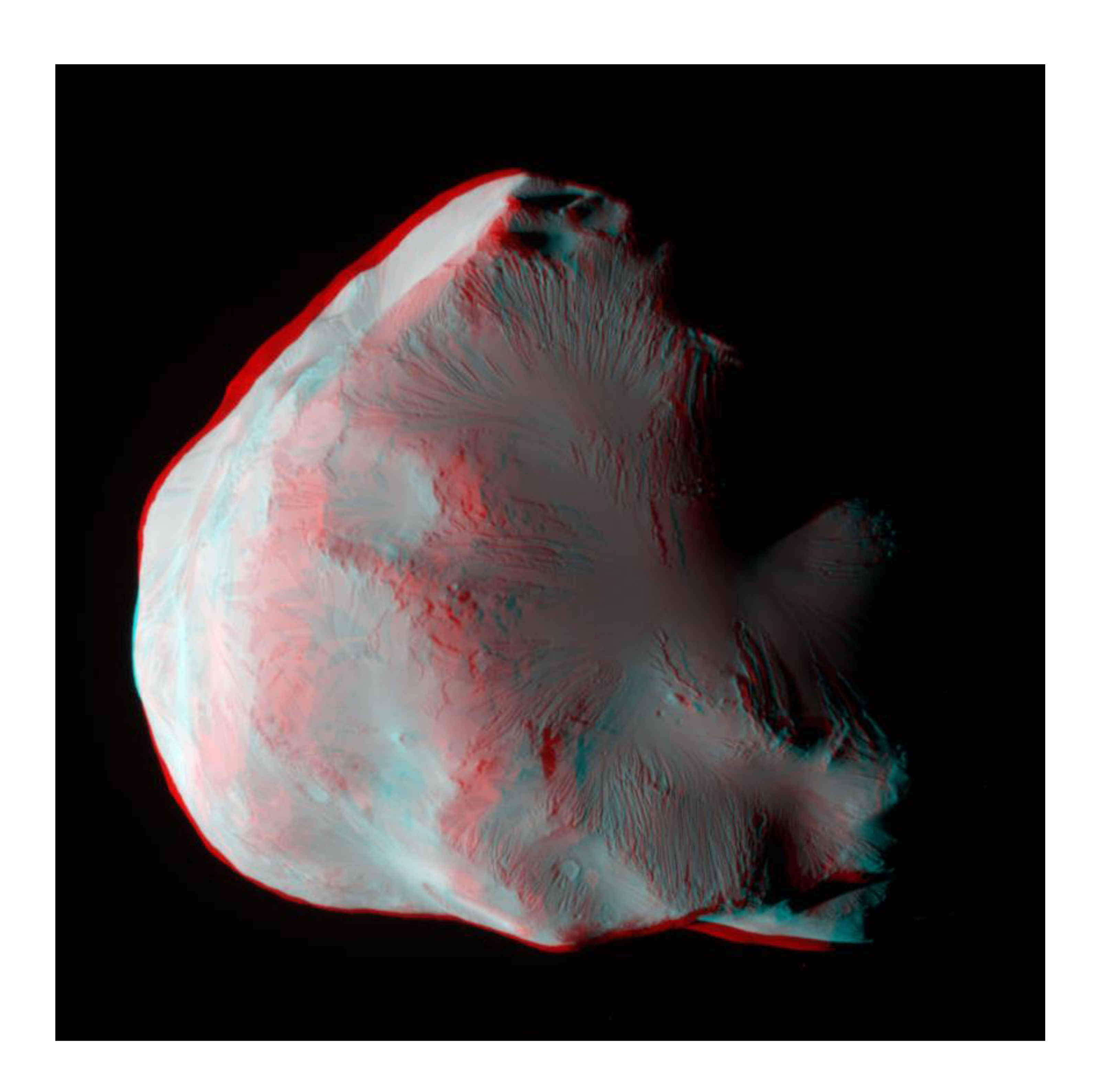
Pan

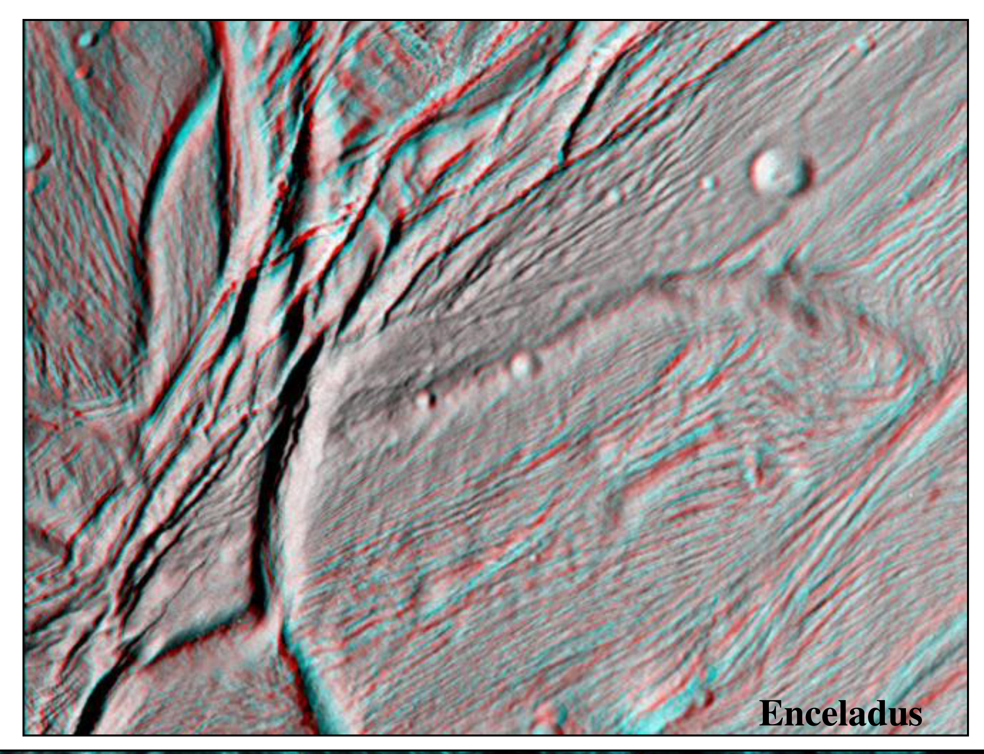


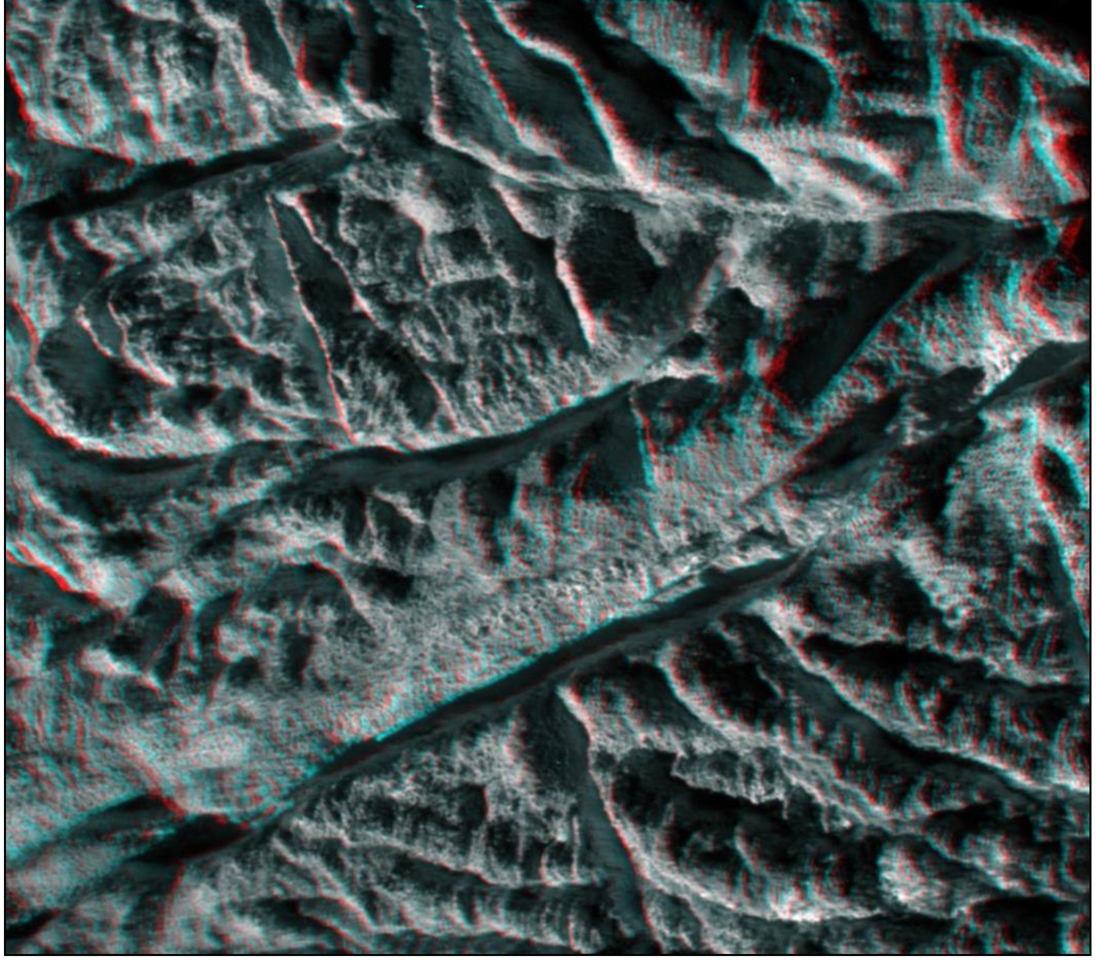
Pandora

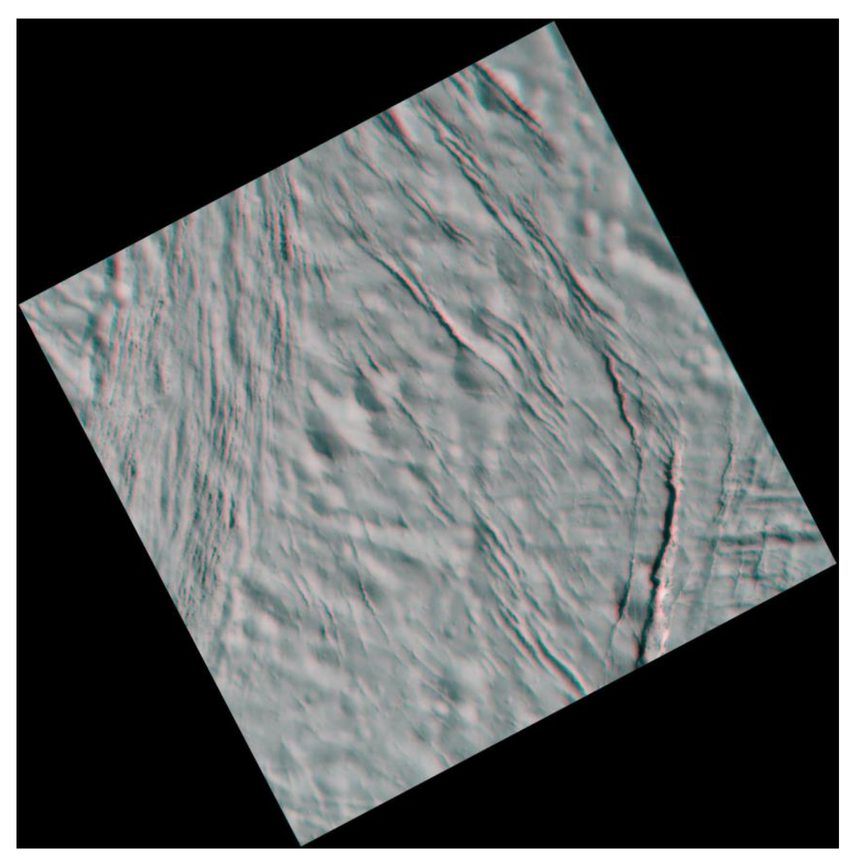

Iapetus

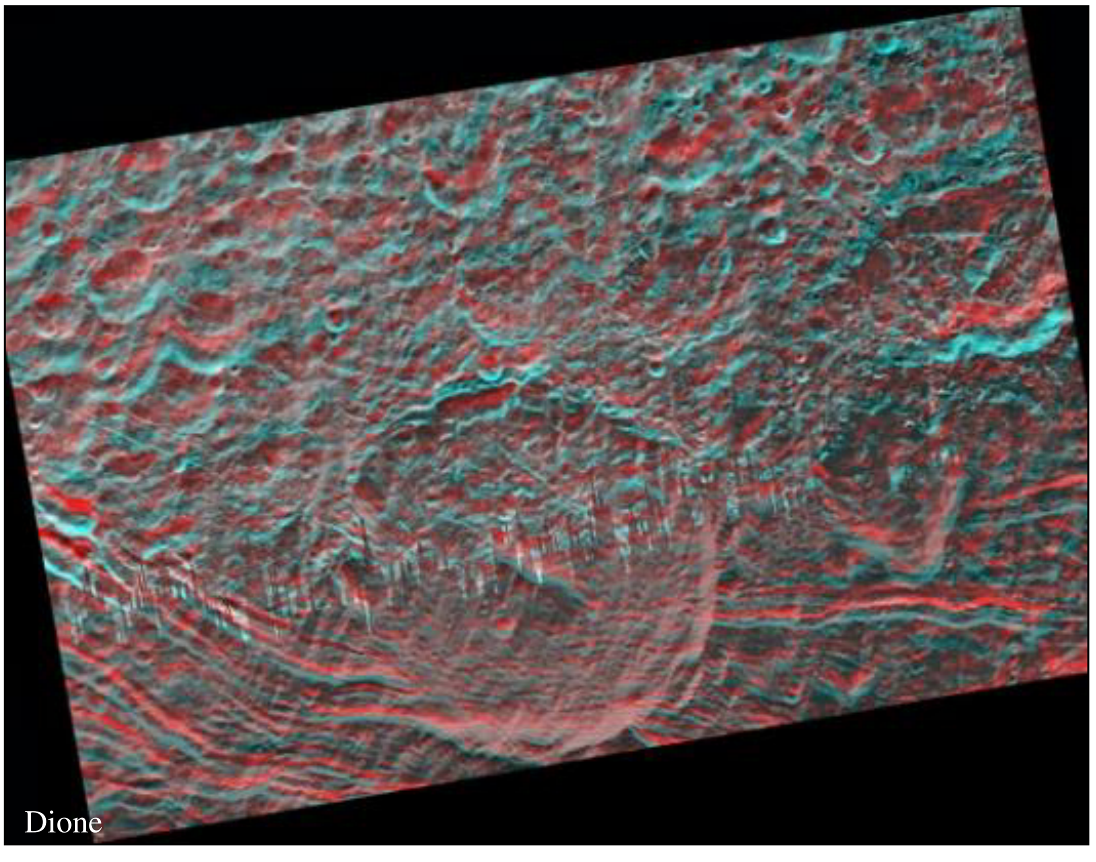

Helene




Enceladus





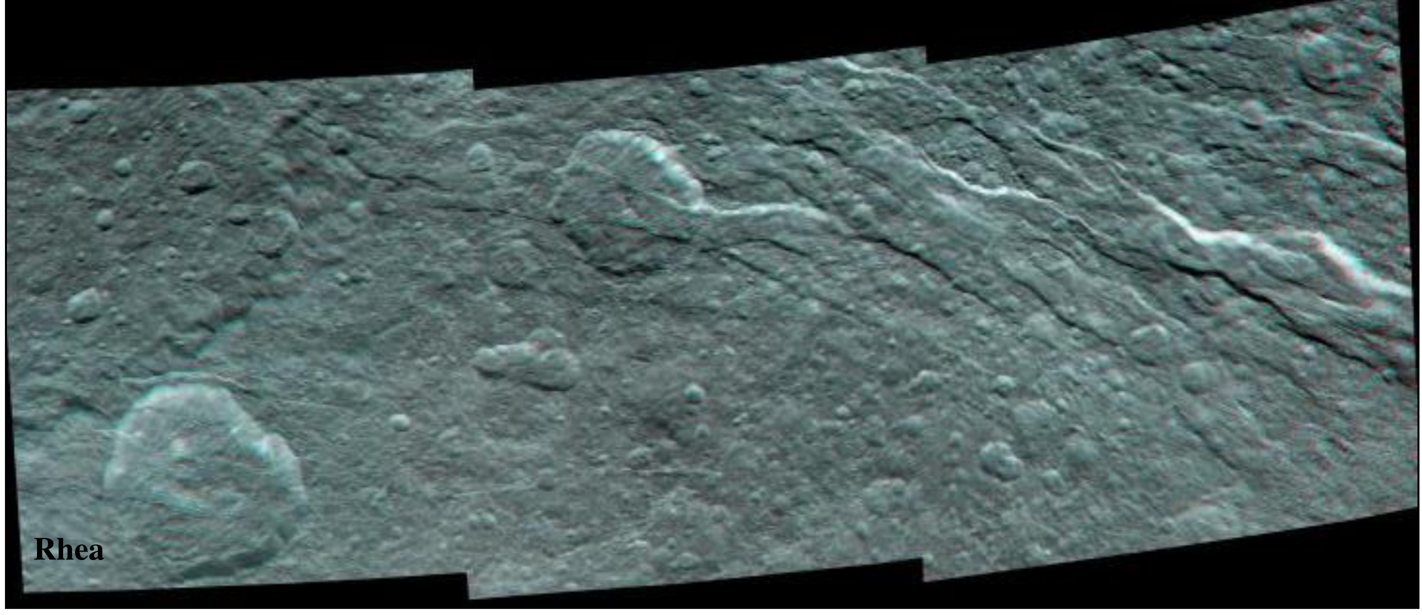

Dione

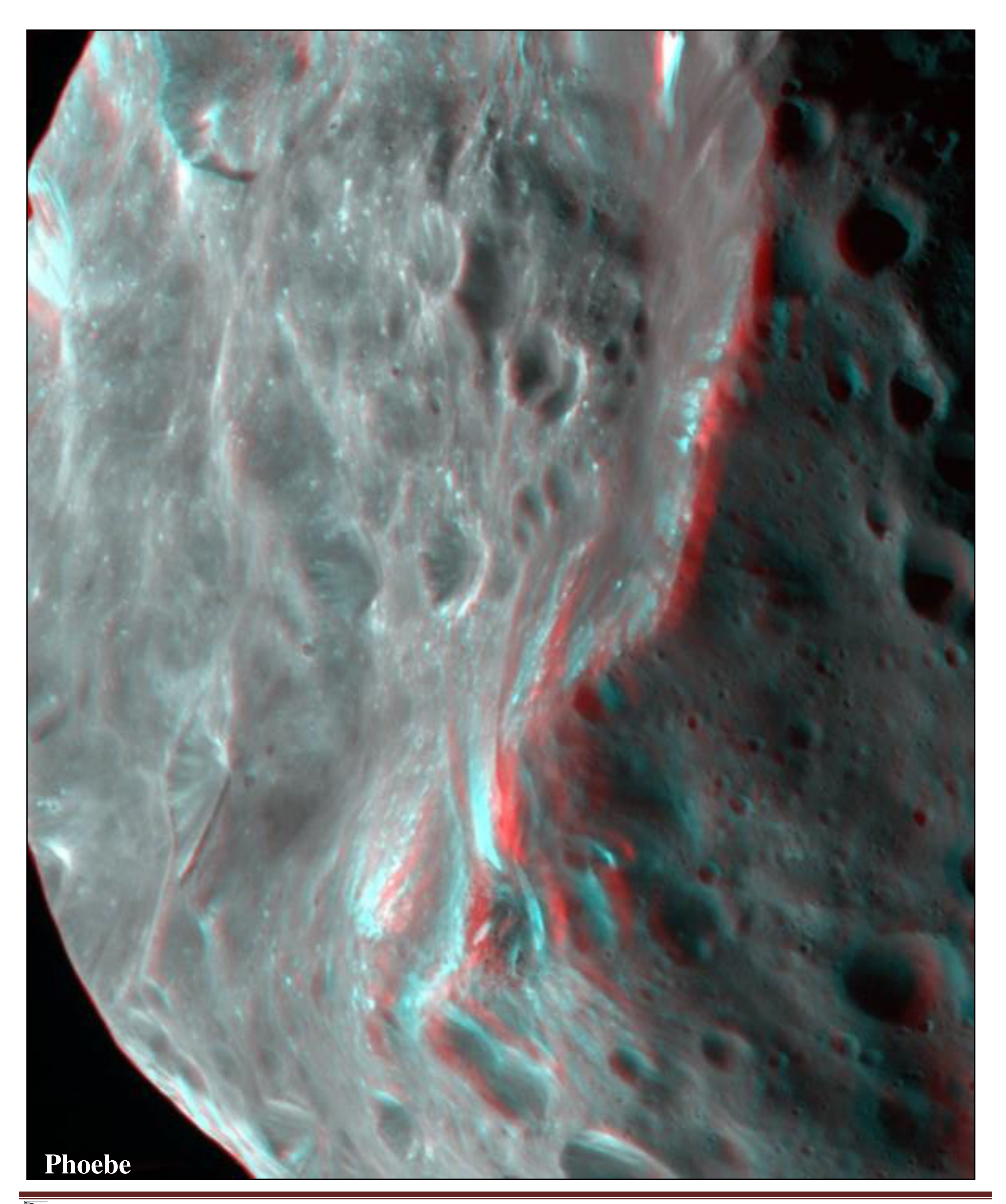
Tethis



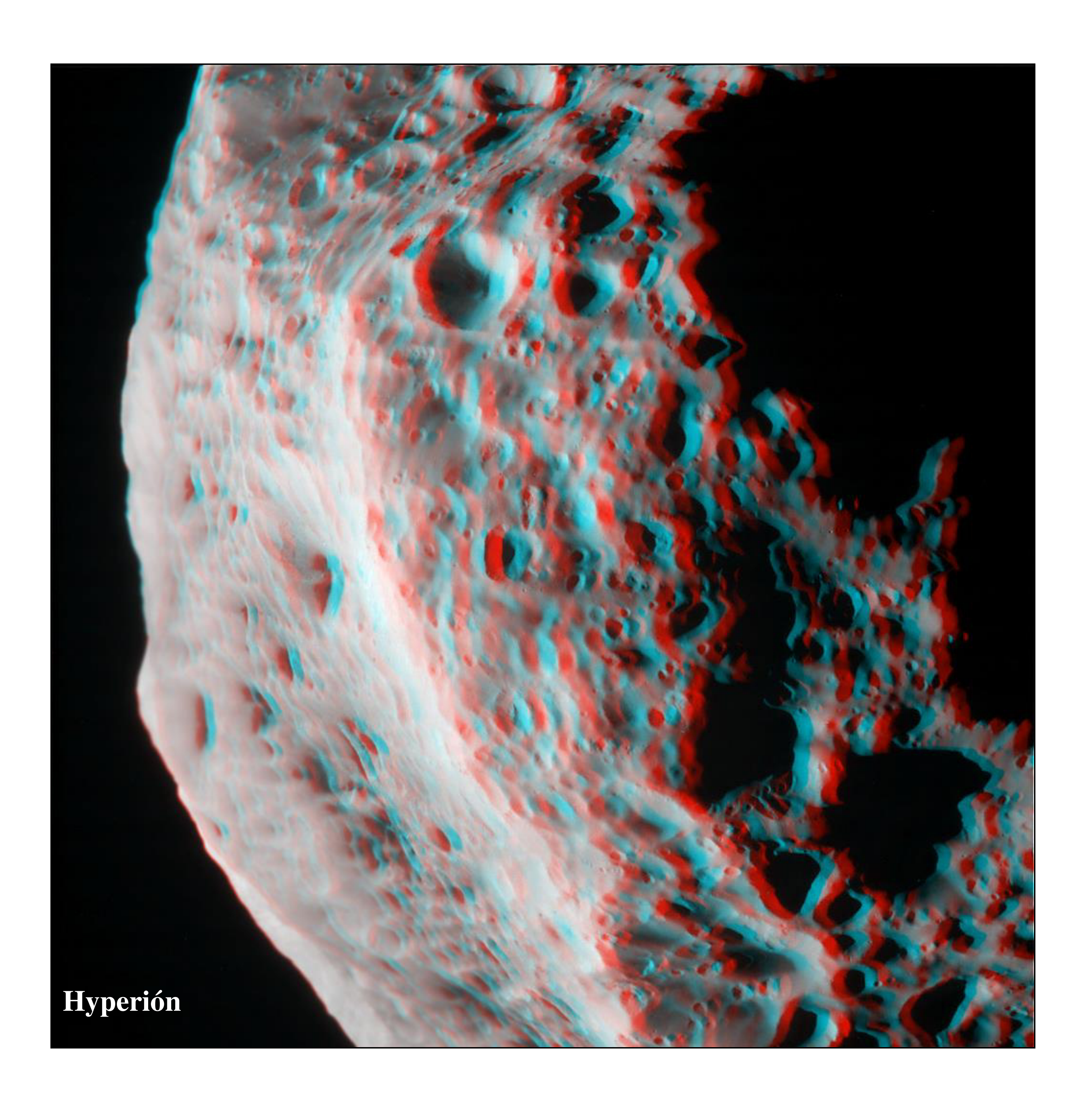
Prometheus

Mimas

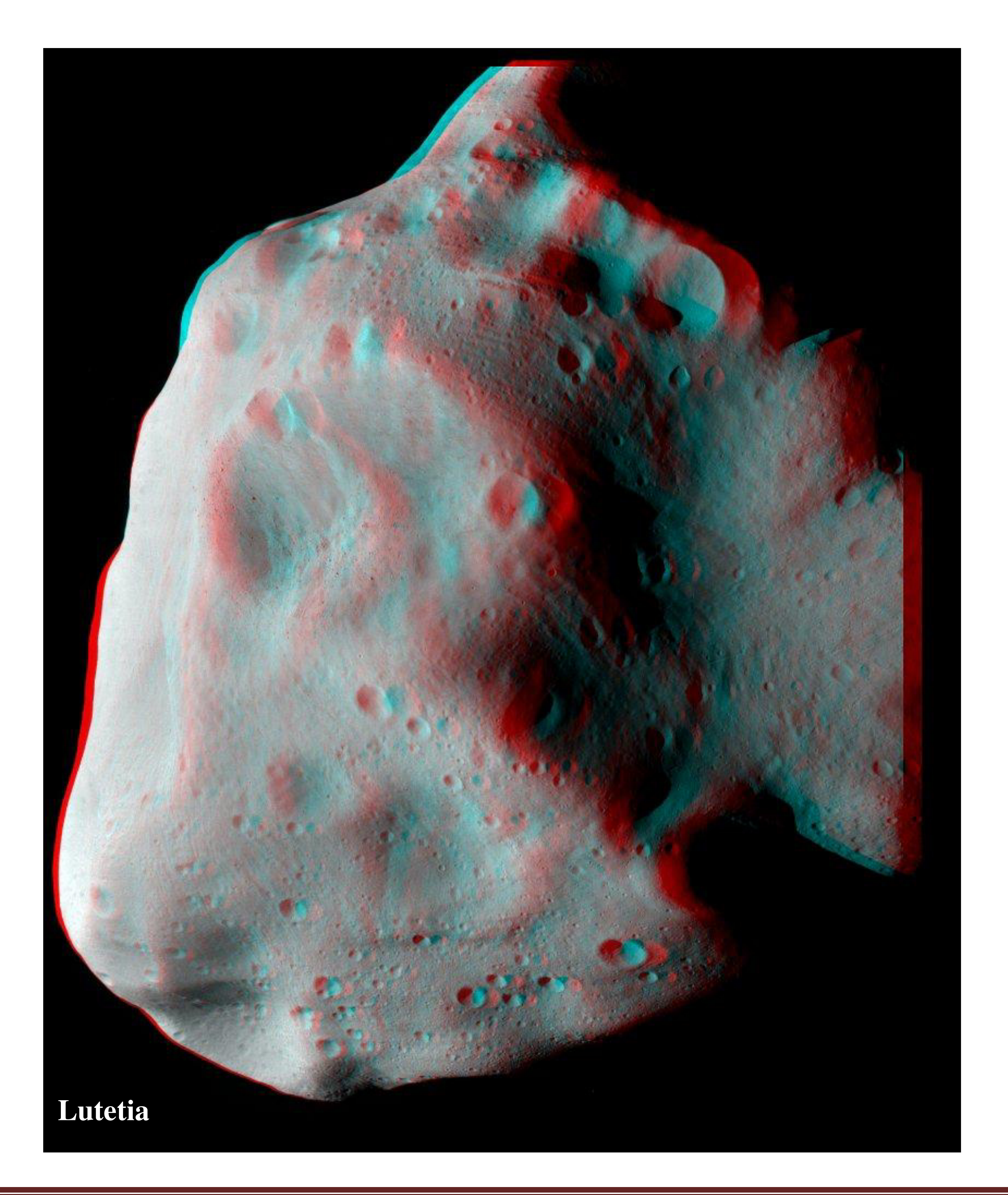


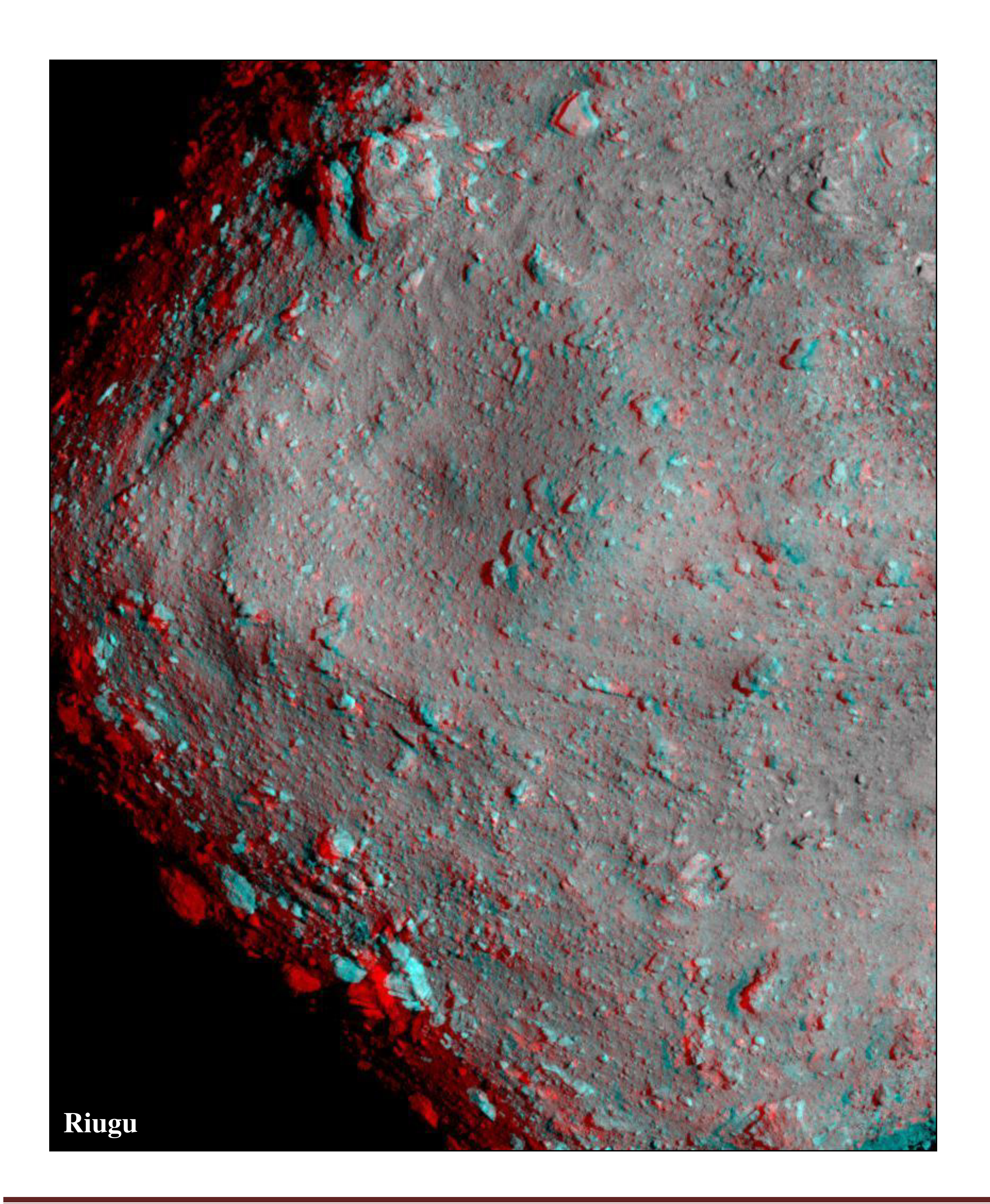

Phoebe


Titán

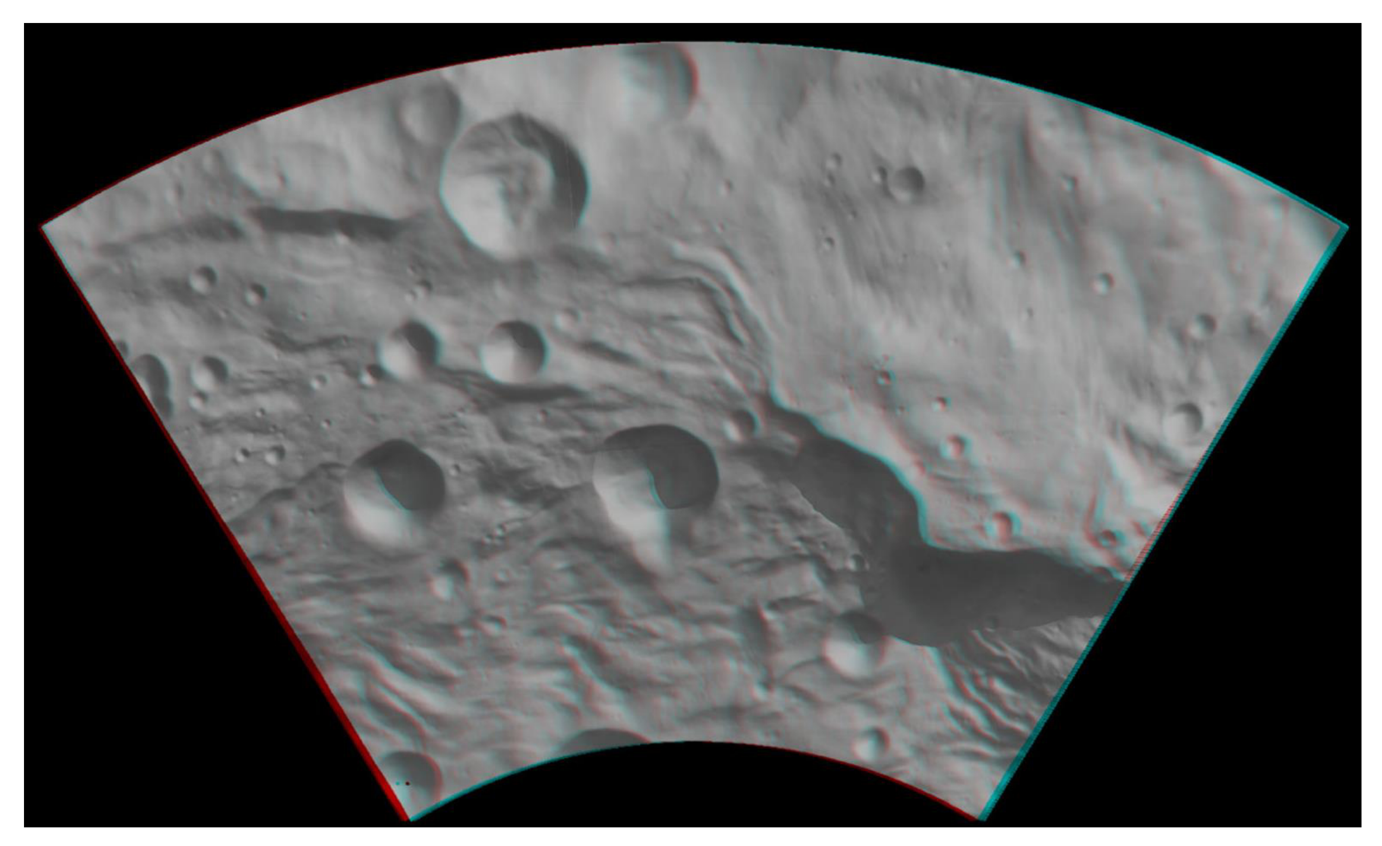

Hyperión

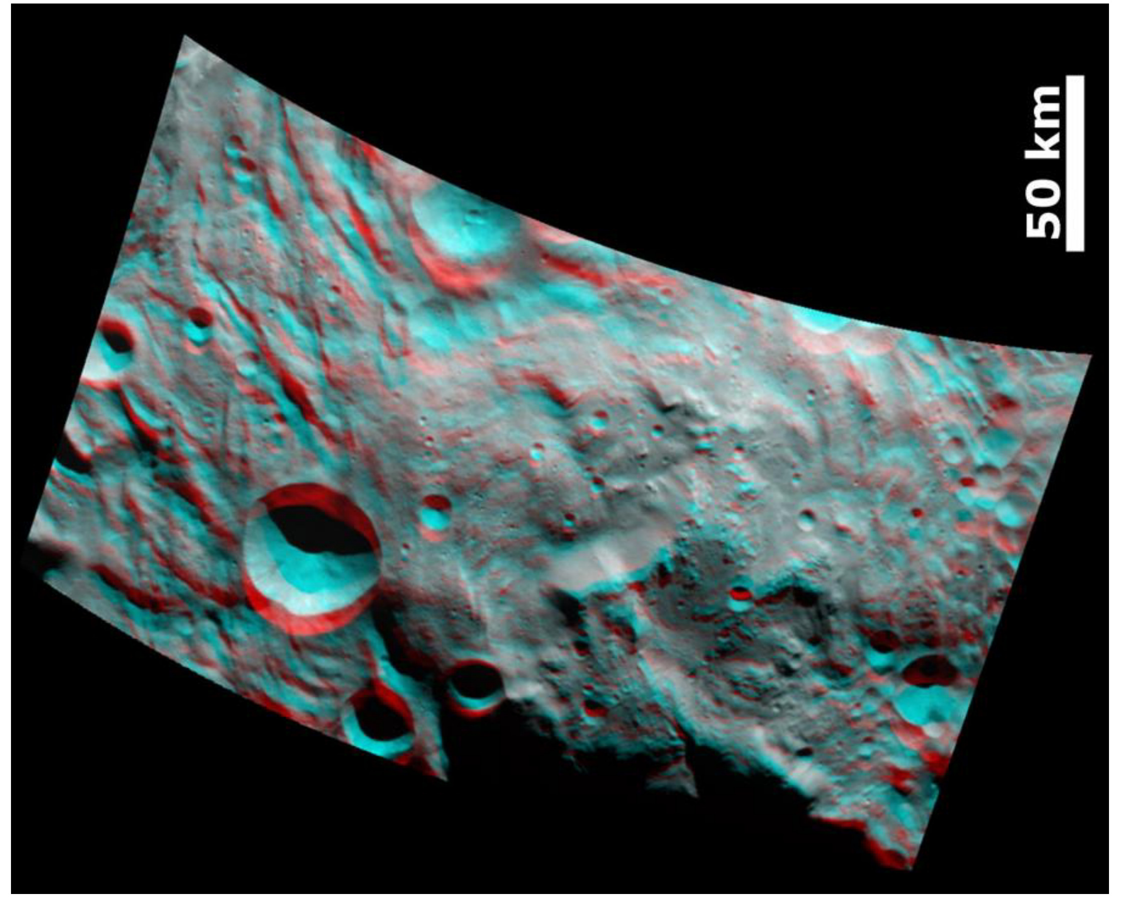
Asteroides

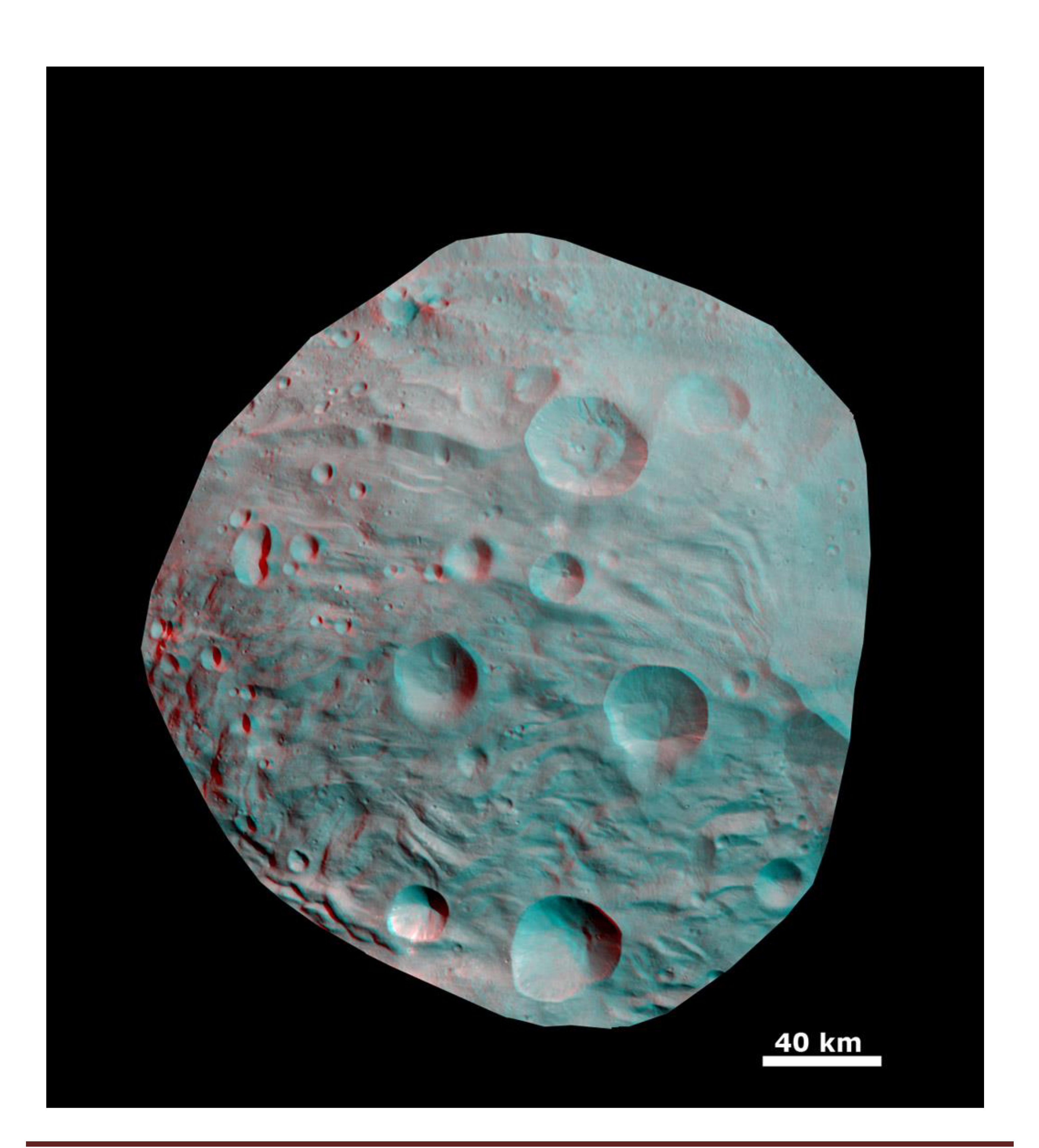



Riugu

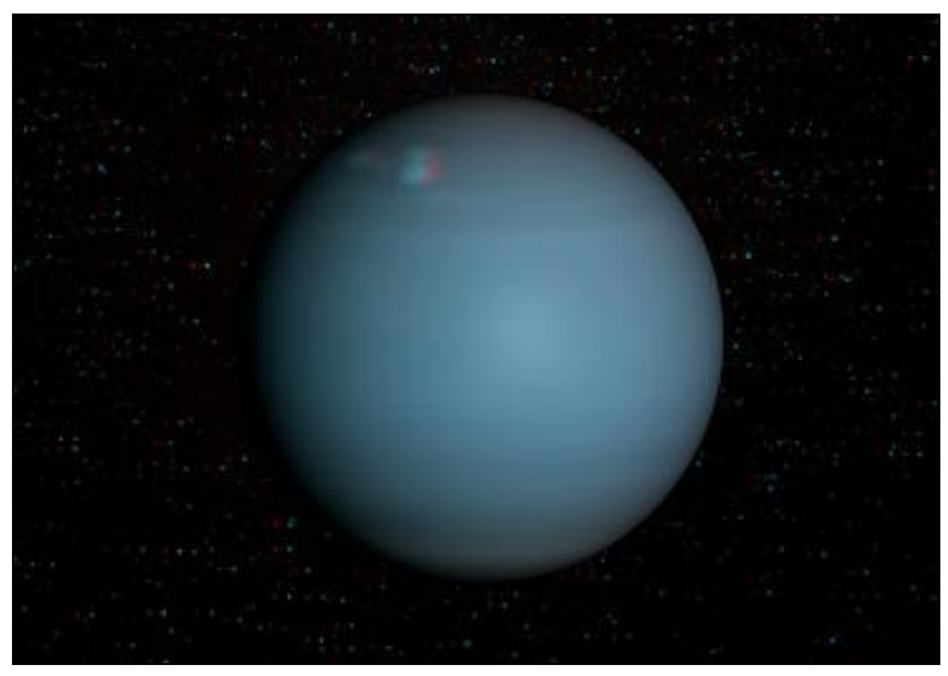
Vesta



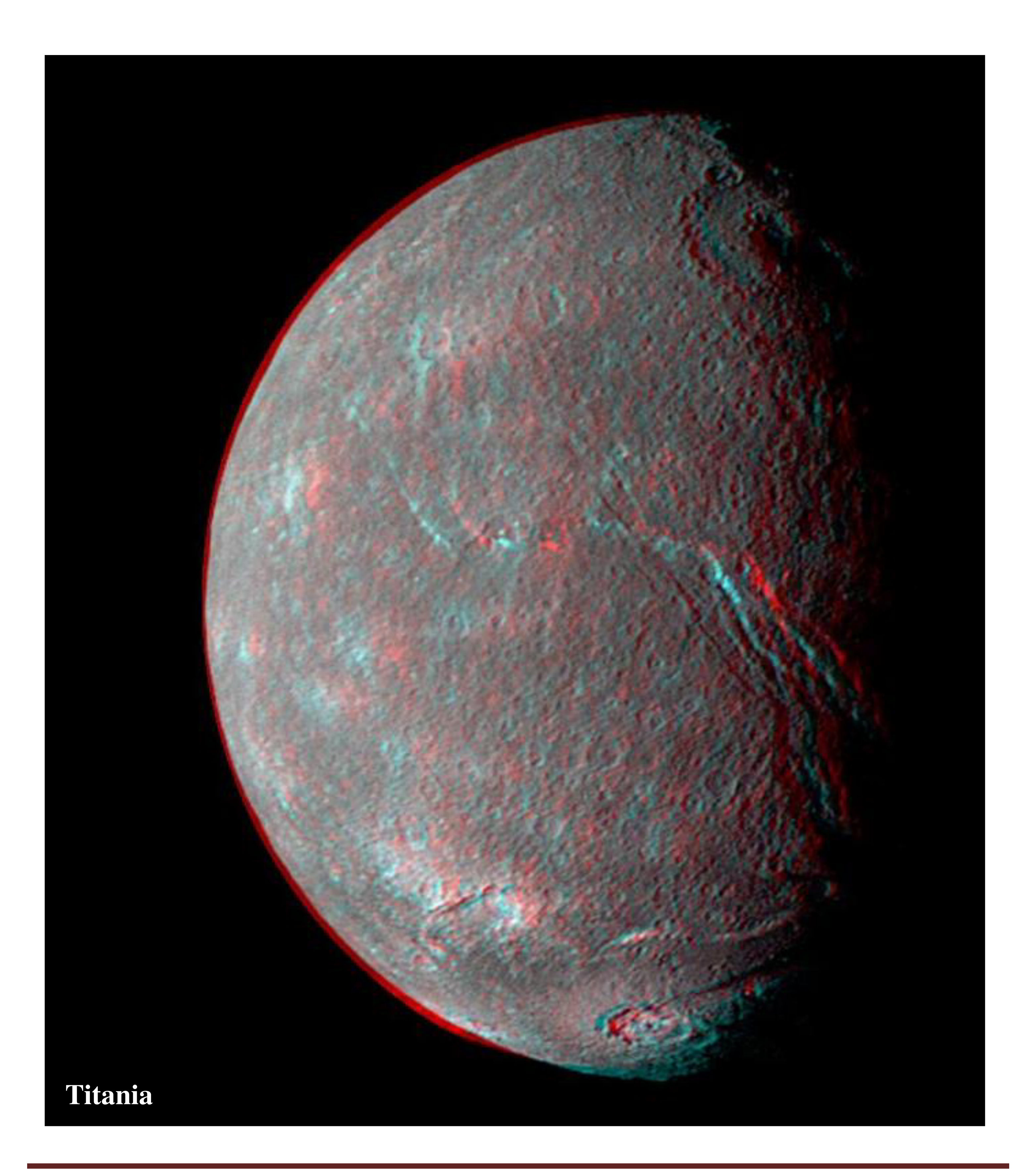



40 km

__Urano__



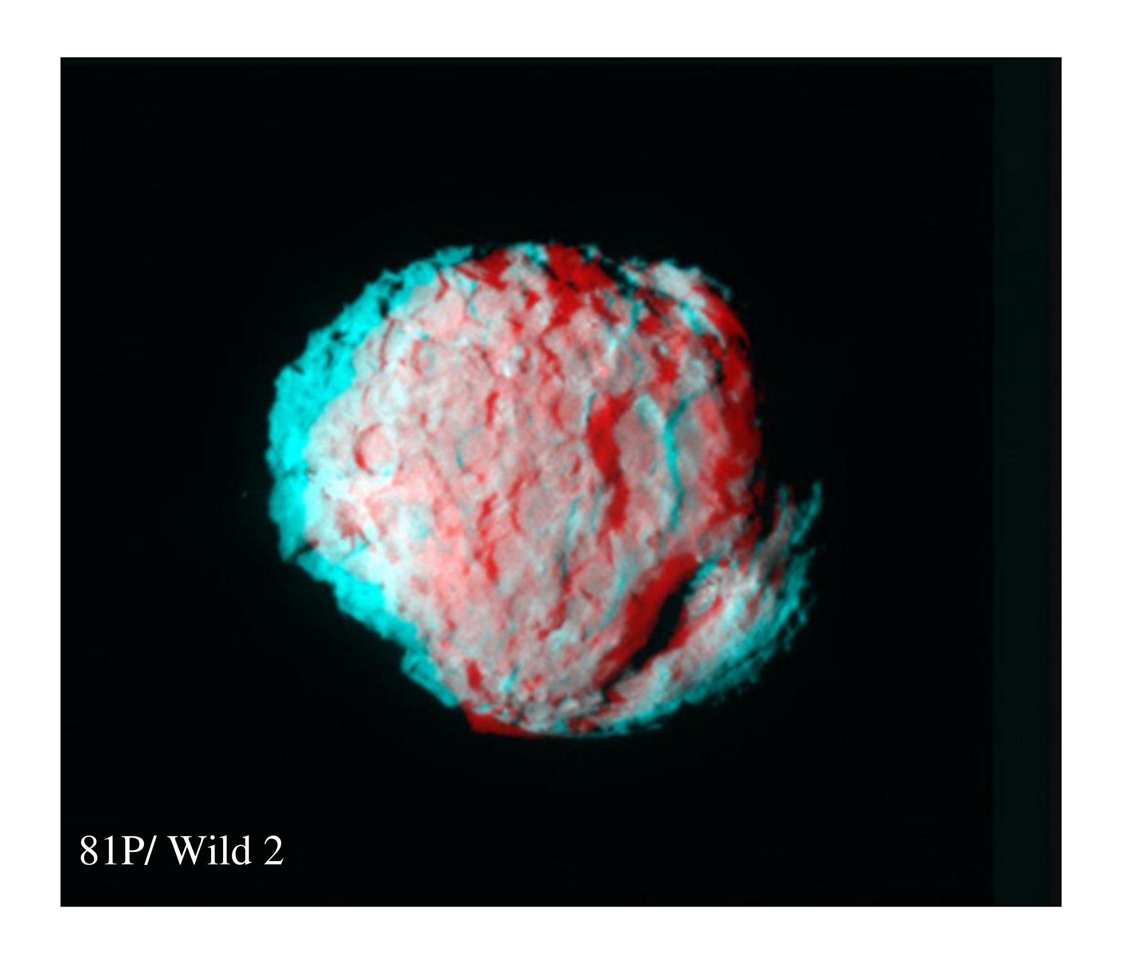
Ariel


Titania

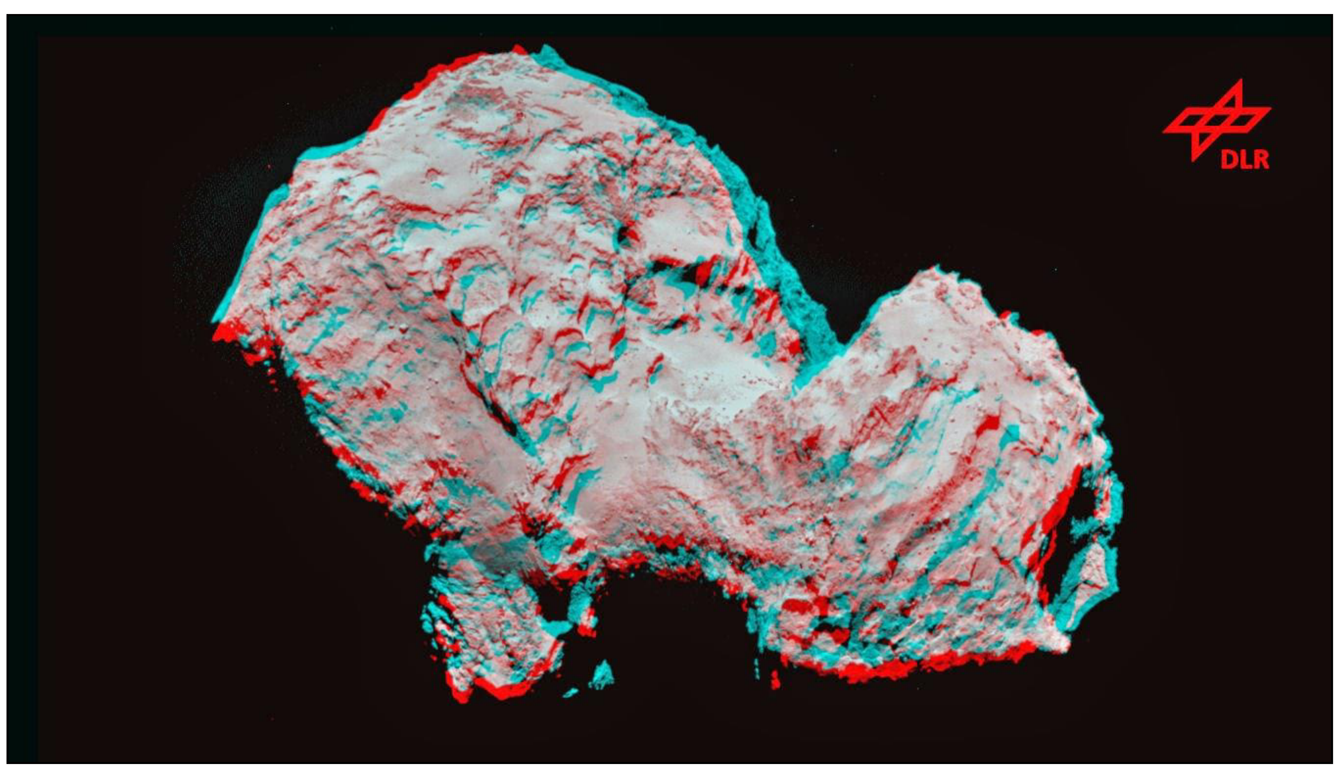
Neptuno

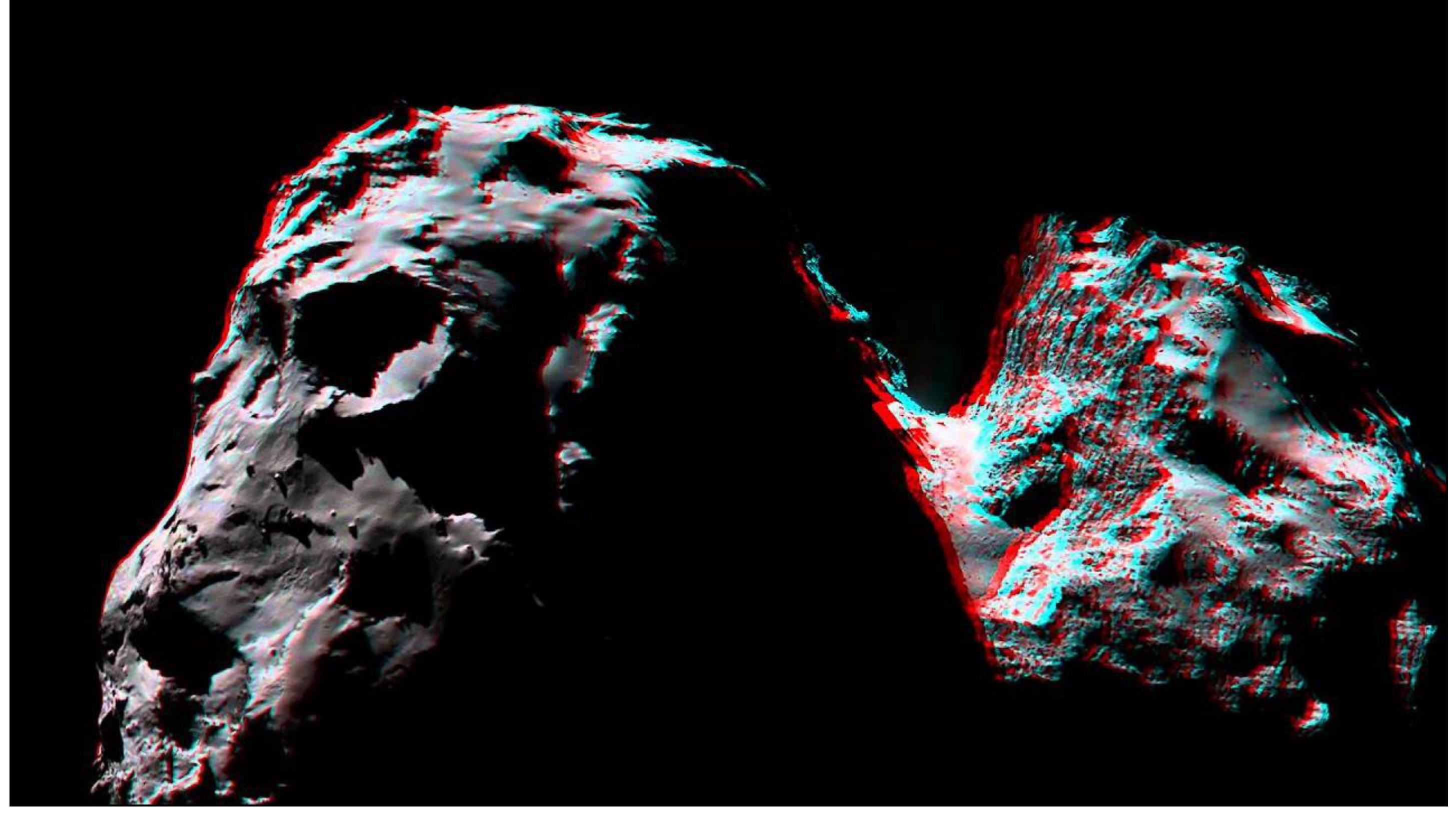


Cometas

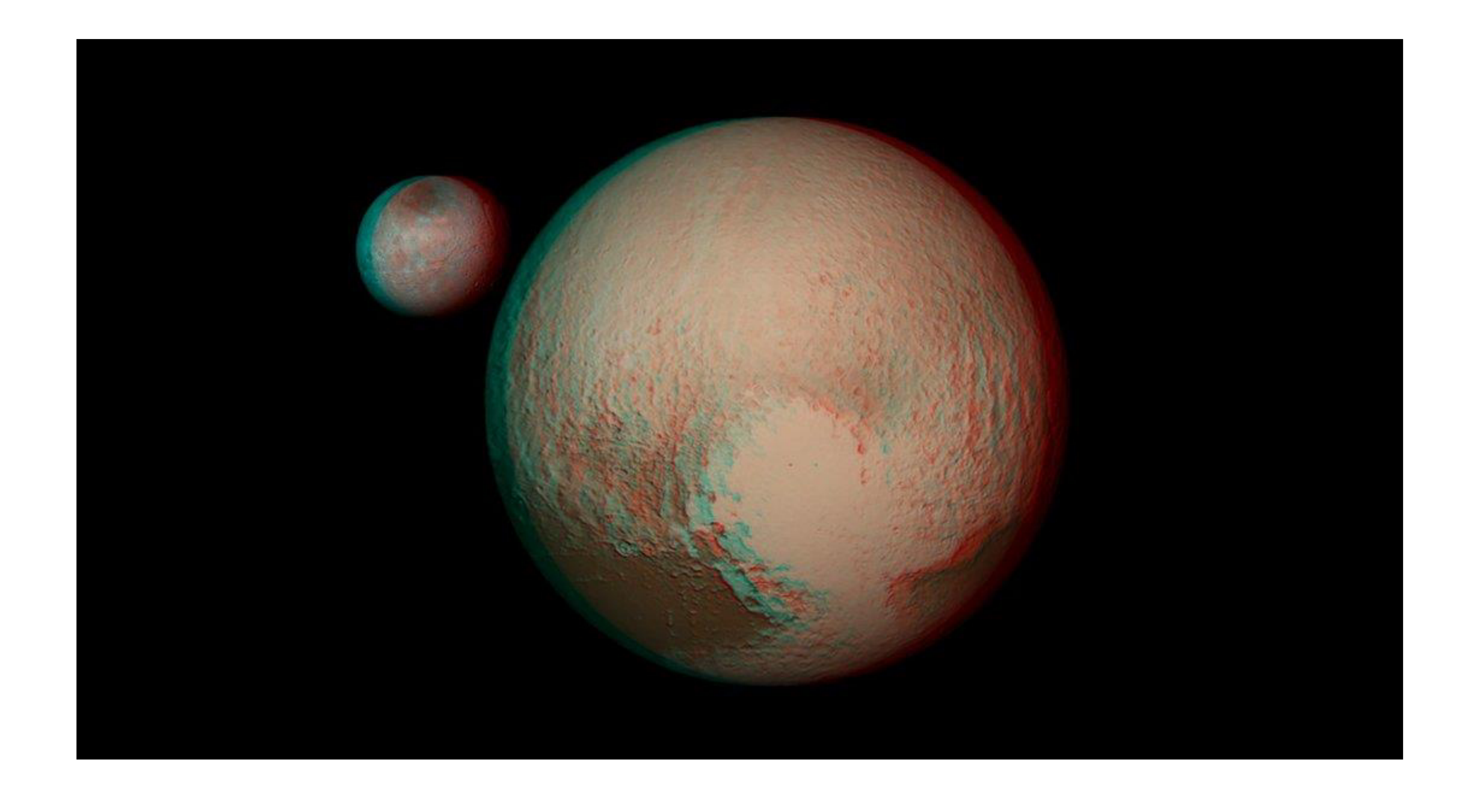


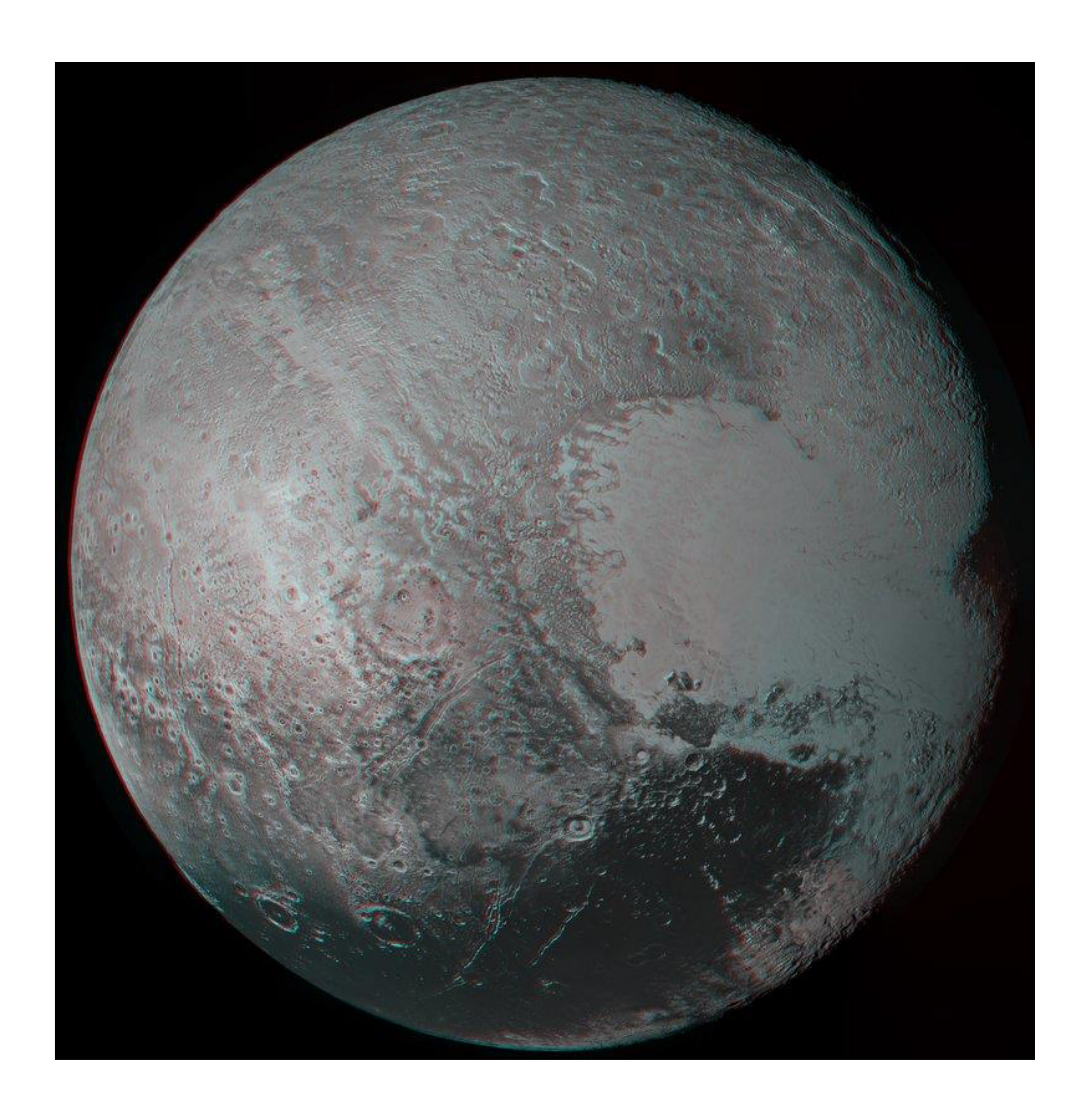
Cometa 67 P/ Churyumov-Gerasimenko

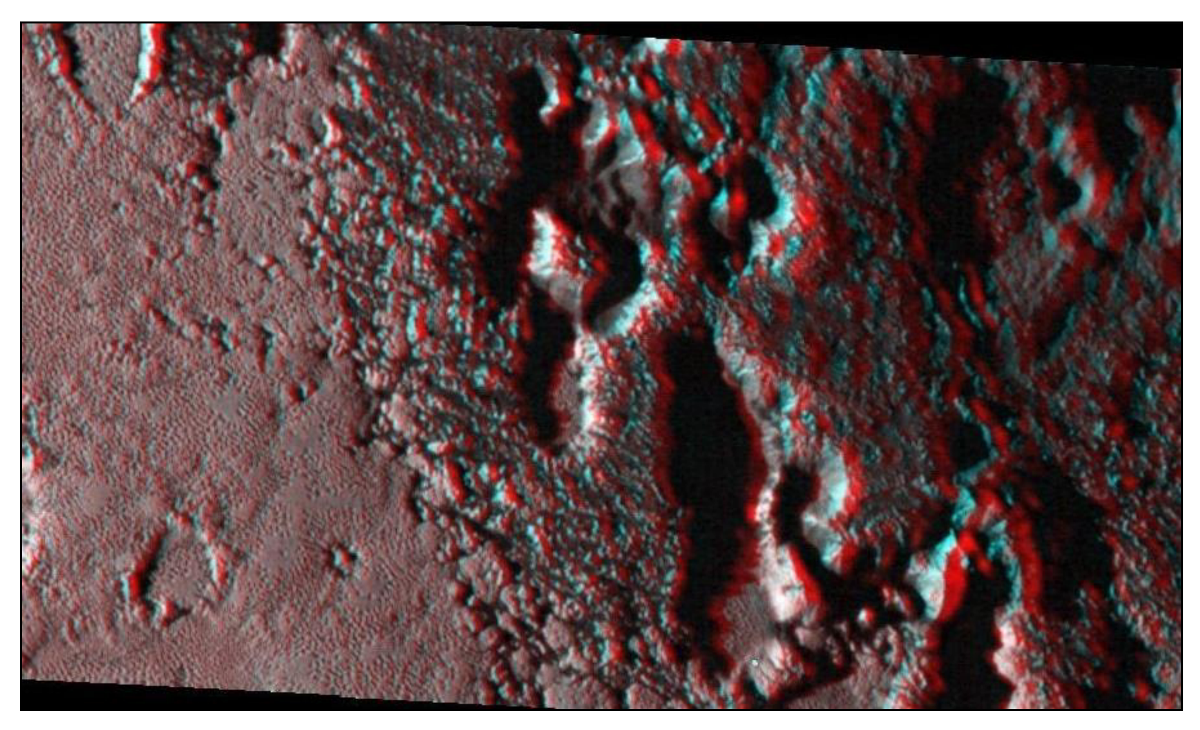


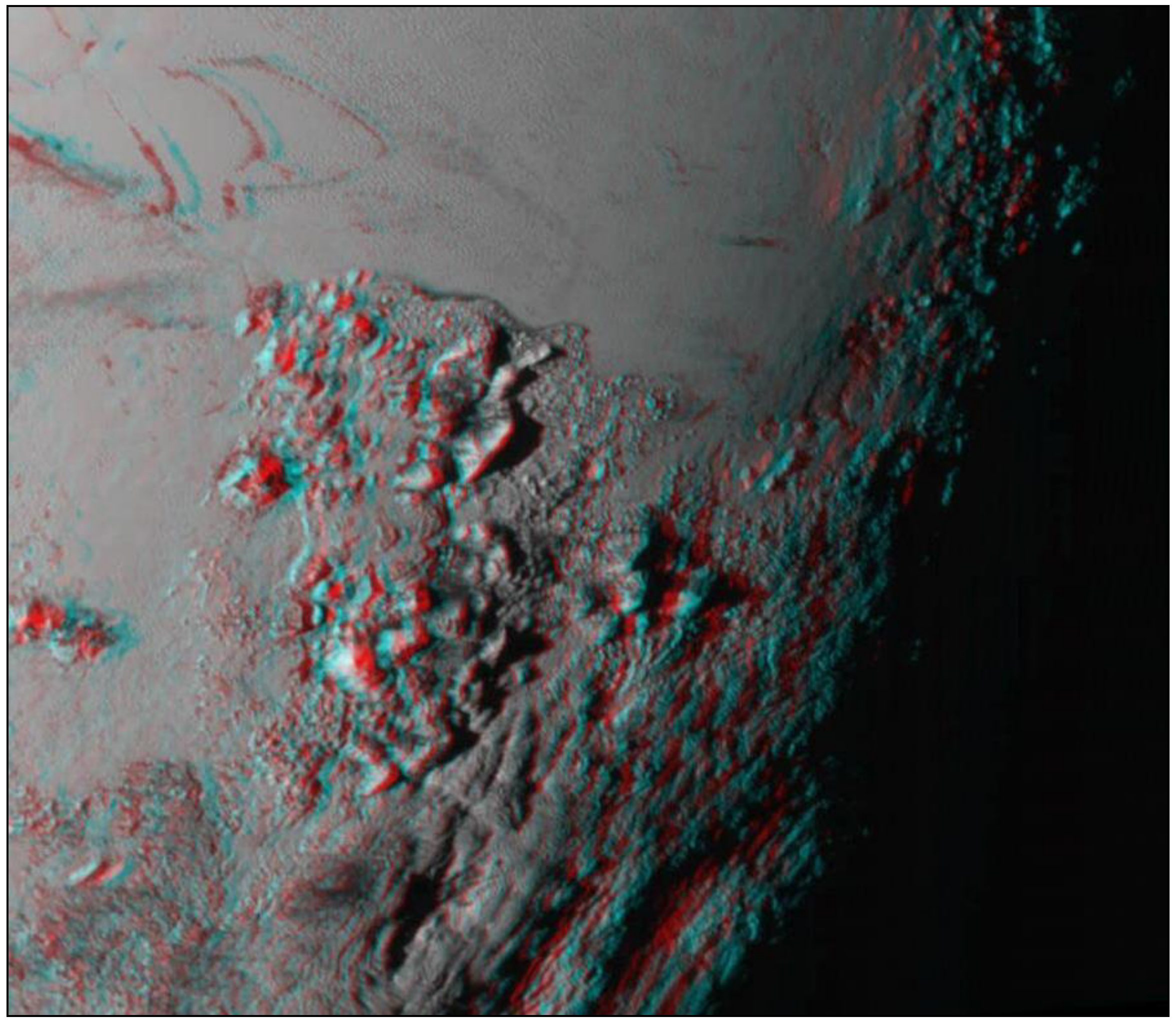


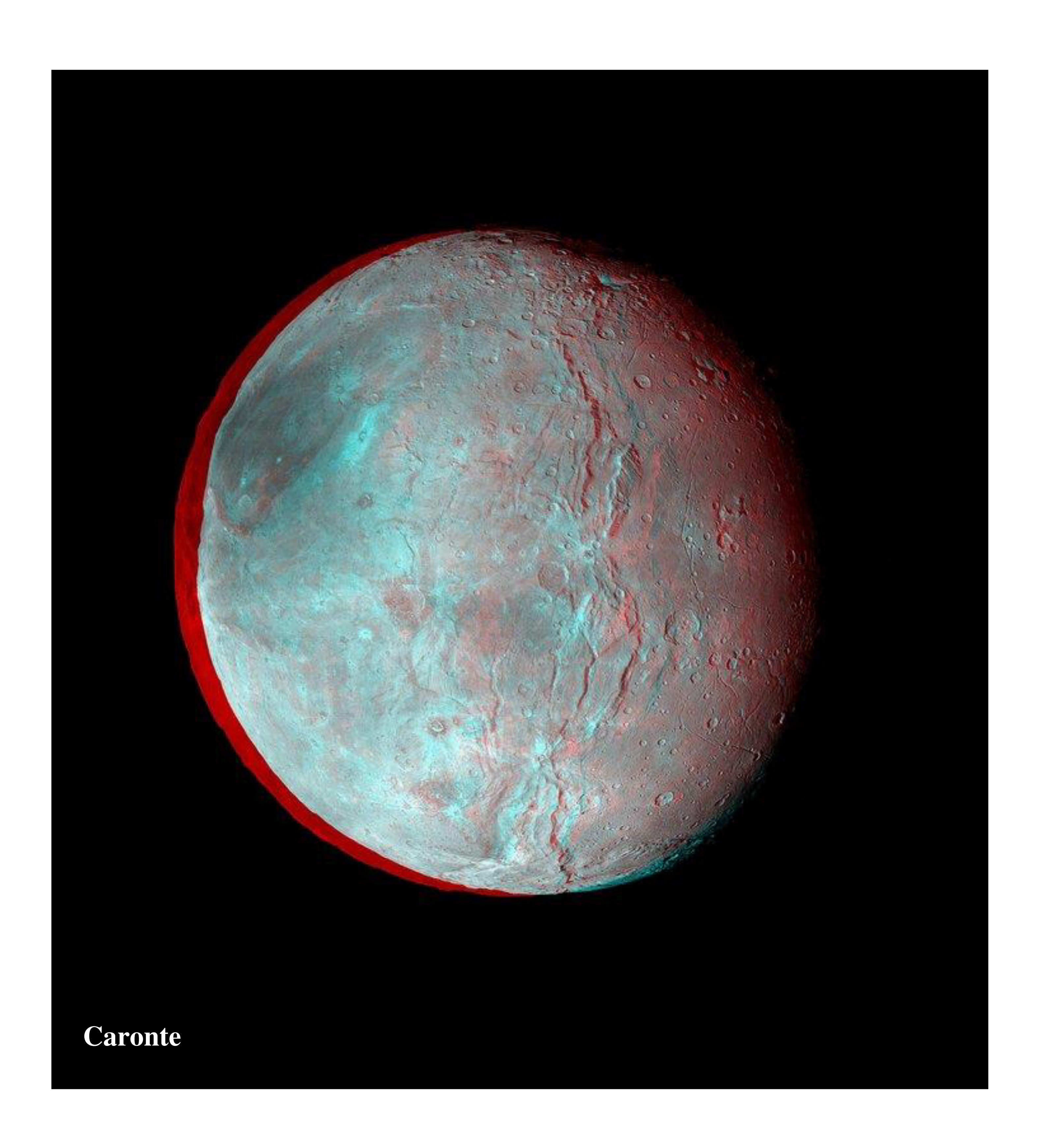
Plutón

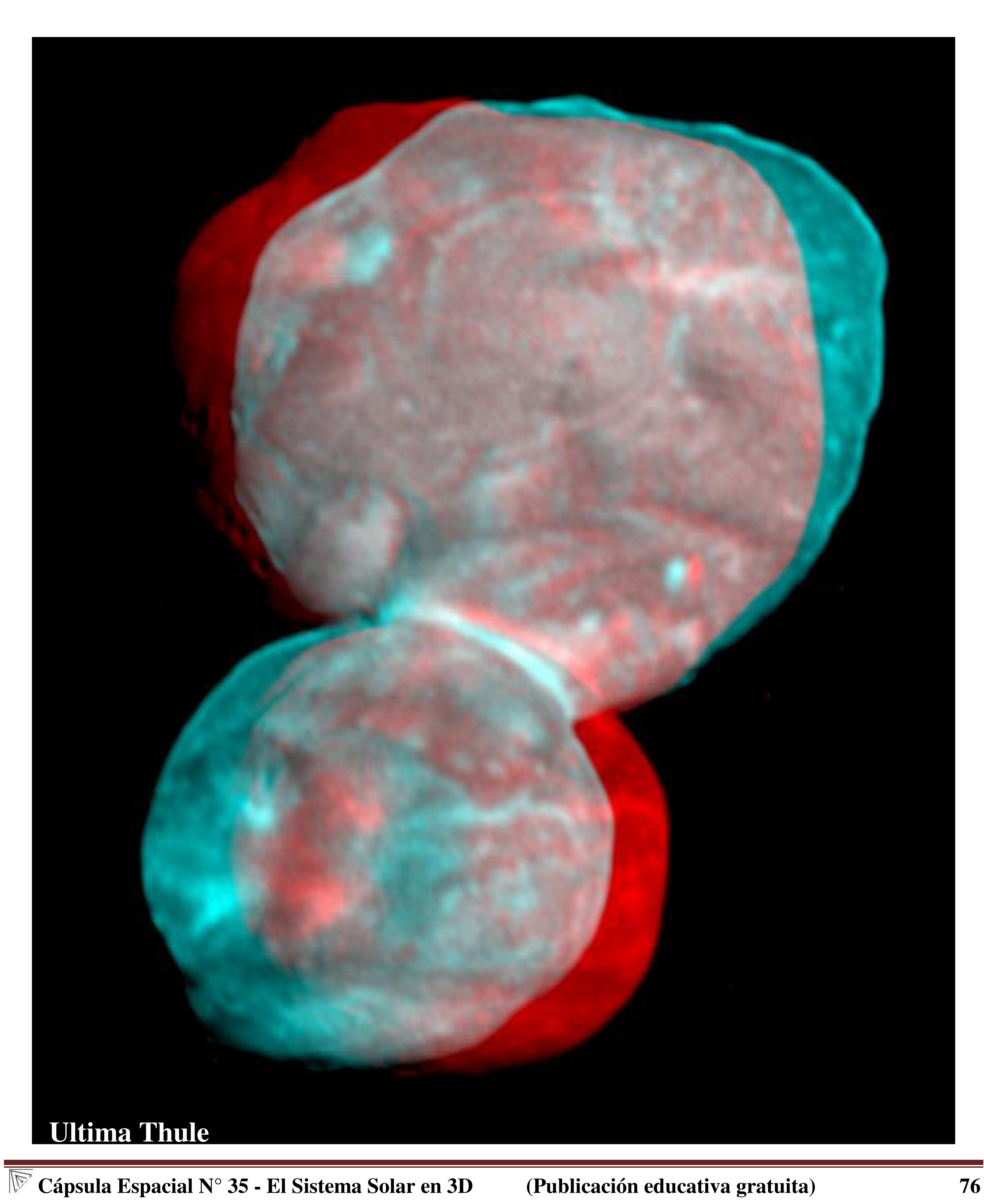









Caronte


Ultima Thule



Contenidos astronómicos educativos

A través del canal de Youtube de la Sociedad Lunar Argentina (SLA) se los invita a disfrutar del ciclo de charlas educativas Café Lunar y a diversos videos que tratan temas sobre astronáutica observaciones de la Luna, Sistema Solar, instituciones, etc, aquí los correspondientes enlaces.

Selenografía
https://www.youtube.com/watch?v=Ydq6eYM7OMQ&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=12

Zonas brillantes de corta duración en el amanecer lunar
https://www.youtube.com/watch?v=_MCrm4wmTM0&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=3

Cráteres con rayos brillantes (en Luna llena)
https://www.youtube.com/watch?v=-5KqLI2mrsc&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=15

Un paseo por Mare Crisium
https://www.youtube.com/watch?v=3GNlaPnyVwY&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=18

Que se puede observar en un eclipse de Luna
https://www.youtube.com/watch?v=0dYK5S-zvsk&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=19

Observación amateur de Dorsa lunares
https://www.youtube.com/watch?v=48aa9257olY&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=16

Mercurio y su observación
https://www.youtube.com/watch?v=Tn3IvAQmYEo&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh

Exploración del planeta Venus
https://www.youtube.com/watch?v=7nFz-iCDLJo&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=14

Observación de cometas, magnitud visual y fotométrica
https://www.youtube.com/watch?v=SFeJIS7VChA&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=4

Observación de meteoros, las Áridas
https://www.youtube.com/watch?v=optq4-pkXYo&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=17

Trapecio Austral, observando desde Mar del Plata, Argentina
https://www.youtube.com/watch?v=CfjDPcxpVYE&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=5

Dial Radio/TV, observación lunar por aficionados
https://www.youtube.com/watch?v=LeGtfCrefTs

LIADA, observación amateur de la Luna
https://www.youtube.com/watch?v=ttCN_hWf8R4

LIADA, regreso a la Luna… y mas allá
https://www.youtube.com/watch?v=21pcpk5-8eQ

LIADA, estudios científicos de los Fenómenos Lunares Transitorios
https://www.youtube.com/watch?v=UO8UFoQen7E

Bases lunares, historias y perspectivas
https://www.youtube.com/watch?v=rELeiz6pimw&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=8

Bases lunares, desafíos de la vida en la Luna
https://www.youtube.com/watch?v=u_A53QQwbzs&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=9

Bases lunares, colonización
https://www.youtube.com/watch?v=1-ne2WBy2uE&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=10

Semana Internacional del Espacio, 50 años Apollo-15 - Investigando Palus Putredinis
https://www.youtube.com/watch?v=UvpEzgOqyAY&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=11

Robertito, un proyecto lunar argentino
https://www.youtube.com/watch?v=F_7MRfraM7E&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=13

Cohetería en el aula
https://www.youtube.com/watch?v=K-pEeY6T_AQ&list=PLTC9b72fieqUAbR1OLMk-hZhx238bKJyh&index=6

Artemis 1, la reconquista de la Luna
https://www.youtube.com/watch?v=MNAExx9N0JQ

Fuentes de información y fotos vertidas en la publicación

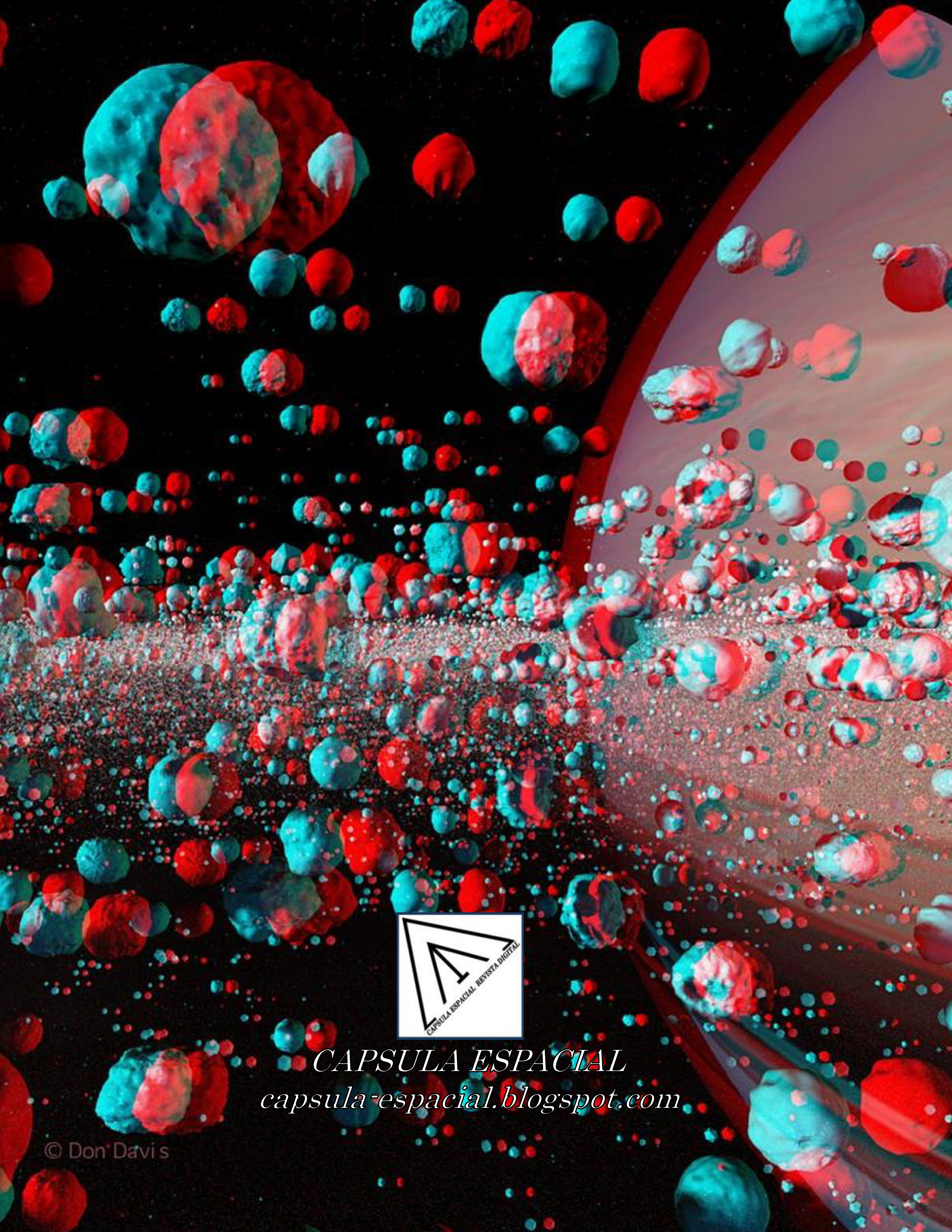
China National Space Agency (CNSA)

German Aerospace Center (DLR)

European Space Agency (ESA)

Don Davis

National Aeronautics and Space Administration (NASA)


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